

elderly, and persons with disabilities to afford decent, safe, and sanitary housing in the private market) and other housing assistance programs in the area. The [HUD Housing Choice Vouchers Fact Sheet](#) provides additional information. ROW practitioners should address the needs of the community during relocation planning and interviews.

The ROW planning stage involves conveying and explaining property rights and potential relocation benefits to soon-to-be displaced individuals, households, businesses, farms, and non-profits. It requires careful preparation to successfully deliver information about an individual's or family's potential relocation, compensation, and comparable replacement properties available on the market.

### ***Example: Newtown Pike Extension***

The Newtown Pike Extension Project in Lexington, Kentucky, necessitated a sizeable EJ mitigation effort to preserve an historic and low-income community. At the time of displacement, there was little housing available at the current rental rate and no decent, safe, and sanitary housing available. The project team set up temporary housing while constructing new affordable housing adjacent to these communities' former residences.

For more information on the project, visit: [www.newtownextension.com/project-overview](http://www.newtownextension.com/project-overview).

## **Public Involvement**

ROW practitioners typically participate in public meetings during Planning and NEPA; they should maintain general knowledge of local populations and community resources, and coordinate with planning and project development processes as early as possible. During planning, ROW practitioners often attend public meetings and may explain potential project impacts and the ROW process to owners of properties that may be affected by the project. During NEPA review, ROW practitioners attend public hearings to answer general questions about acquisition and relocation benefits.

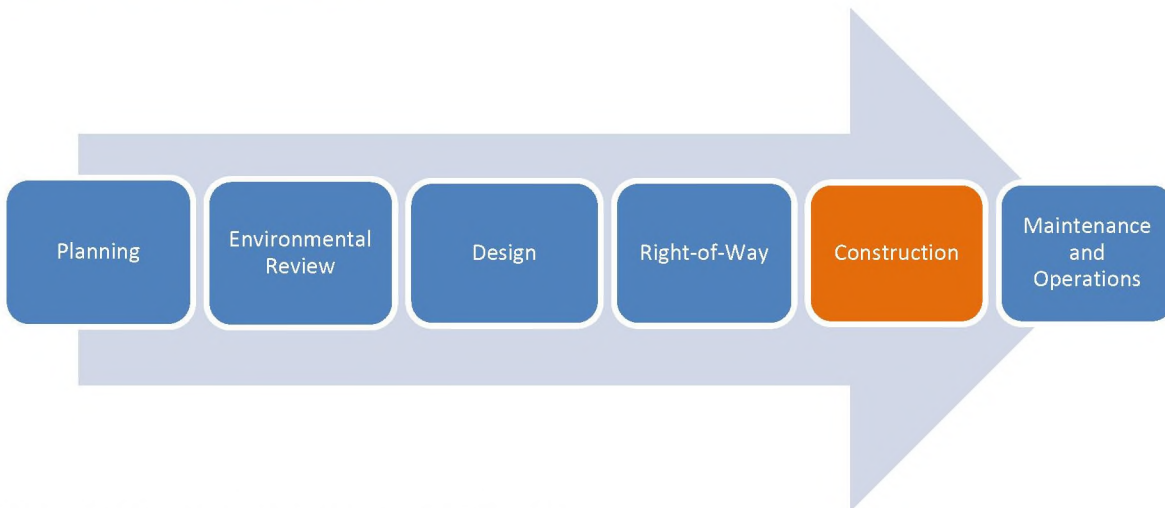
ROW practitioners should remind the members of the public that it can take years to complete the NEPA process. At the planning stage, ROW practitioners should make themselves available to the public as a source of information and to build awareness around the ROW process. Providing the public with informational resources will help educate and manage expectations. FHWA provides a number of such resources that may be helpful for transportation practitioners and the general public such as the [Real Estate Acquisition Guide For Local Public Agencies](#), an [acquisitions brochure](#), a [relocation brochure](#), and a video on [ROW Requirements and the Uniform Act](#). When early acquisition, hardship, or protective buying takes place, the ownership by the agency should be transparent so as not to cause a negative project influence(i.e. impact on the community).

ROW practitioners should conduct interviews with those facing relocation to determine whether there will be any major issues such as the relocation of a business away from its market. Sometimes EJ issues will arise during these interviews but typically they are identified and mitigated during NEPA and environmental review. ROW practitioners should warn potential displacees (whether owners or renters) not to move prior to receiving an offer of relocation benefits or a notice of intent to acquire from those tasked with performing the relocations; they could jeopardize their benefits by doing so. ROW

practitioners should also inform owners that it is in their best interest to continue maintaining a property, even if vacant, as the condition of the house will influence the “fair market value.”



## EJ in Construction



This section discusses environmental justice (EJ) responsibilities during construction. During the design phase, Federal Highway Administration (FHWA) funding recipients incorporate EJ recommendations and commitments into construction contract documents so that all potential contractors understand these items and take them into consideration when bidding for a project.<sup>31</sup>

Working closely with funding recipients, FHWA staff can help ensure that project development staff incorporates commitments made during project decisionmaking into final design and construction. Subsequent contract

### ***Practitioner***

In this document, the term “practitioner” refers to the agency staff directly conducting an activity or project, which in most cases will be FHWA funding recipients, such as State departments of transportation and metropolitan planning organizations. FHWA primarily serves in an oversight and advisory role.

## Key Questions to Consider for EJ in Construction

FHWA staff should consider the following key questions related to EJ in construction. These are not intended to be prescriptive or exhaustive, and they may not be applicable to every situation:

- Are potential bidders aware of and do they understand EJ-related design commitments articulated in the construction contract?
- Do any contract change orders alter or compromise design commitments, or do they create new EJ issues?

<sup>31</sup> [FHWA Contract Administration Core Curriculum Participant's Manual](#)

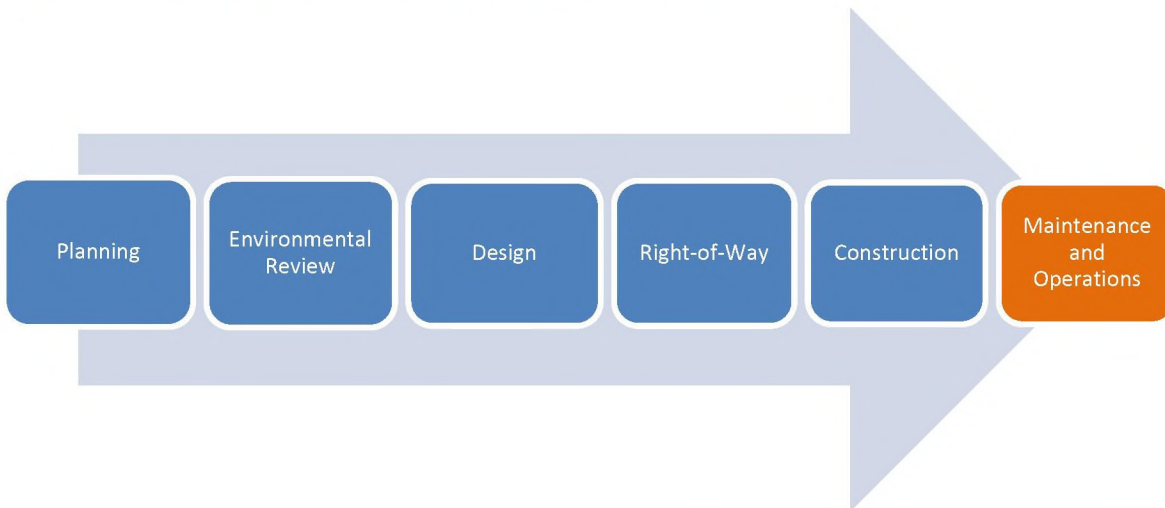
actions, including change orders, should not alter or compromise those commitments in any way or create new EJ issues. During construction the funding recipient and the contractor should ensure that the contractor builds the project according to the contract documents.

Sometimes contractors experience unforeseen conditions in the field that require a change order to alter the contract requirements.<sup>32</sup> Contractors frequently use change orders to make the design a better fit for the actual field conditions. A change order may result in a better product at no substantial increase in cost or time, or an equivalent product with savings in cost, time, or both. FHWA funding recipients should ensure that construction project staff fully understand all contract commitments and requirements, including EJ and other National Environmental Policy Act (NEPA) commitments, when reviewing and approving contract modifications to ensure that the changes are consistent. Good communication is important to ensure that the contractor can effectively transition commitments and recommendations into the modified design and understand any potential new impacts.

---

<sup>32</sup> [FHWA Construction Program Guide](#)

## EJ in Maintenance and Operations



### Introduction

This section discusses environmental justice (EJ) responsibilities in maintenance and operations. Maintenance and operations encompass a wide variety of activities including arterial road management, congestion pricing, tolling, traveler information, road weather management, incident management, work zone safety, and planned special events coordination. These activities have broad implications for all populations, and Federal Highway Administration (FHWA) funding recipients should incorporate equity considerations into these activities.

### *Practitioner*

In this document, the term “practitioner” refers to the agency staff directly conducting an activity or project, which in most cases will be FHWA funding recipients, such as State departments of transportation and metropolitan planning organizations. FHWA primarily serves in an oversight and advisory role.

## Key Questions to Consider for EJ in Maintenance and Operations

FHWA staff should consider the following key questions related to EJ in maintenance and operations. These are not intended to be prescriptive or exhaustive, and they may not be applicable to every situation:

- Do the pricing mechanisms and changed traffic patterns of road pricing projects result in disproportionately high and adverse impacts on minority and/or low-income populations?
- When making temporary changes to the transportation system, do practitioners provide accessible alternatives and communicate changes in accessible formats?
- Have practitioners considered the impacts of signal phasing and timing?



## Recommendations

Practitioners should be aware that maintenance and operations activities may impact minority and low-income communities differently than other populations. For example, during a winter storm an agency may habitually plow roads in non-EJ neighborhoods before plowing roads in certain low income and minority neighborhoods. This could affect members of the low income and minority neighborhoods' ability to get to work, which is a negative impact. Practitioners should consider whether the benefits and burdens of maintenance activities are equitably distributed. The following sections describe how practitioners can address EJ as it relates to maintenance and operations.

### *Road Pricing and Tolling*

Congestion pricing and variable pricing are popular congestion management strategies applied to existing roadways. Tolling has become popular with state and local transportation leaders as a funding mechanism for maintenance, operations, and construction; unlike congestion/variable pricing, a toll is a constant fee that does not vary during peak periods. These approaches can be beneficial, but they also raise important equity issues and are often opposed by the general public. According to studies conducted by FHWA and partner agencies at the State and local level, early consideration of equity issues in the planning and environmental review phases is critical to the success of road pricing projects.<sup>33</sup> When an agency implements a flat fee for a tolled roadway, low-income persons may no longer be able to afford to use the road. Also, many road pricing schemes require travelers to have a transponder—a device that receives a radio signal and sends out a signal in response for payment transactions. Some studies have observed that the cost of a transponder, as well as account setup, can be a barrier for the low-income driver. In cases where the user must link acquisition of a transponder to a bank account or credit card, this often poses a barrier for those without such accounts. Many operators now allow people to pay for a transponder with cash—all practitioners should consider providing this option.

To prevent minority and low-income communities from bearing disproportionately high and adverse effects from tolling, practitioners should consider effective corridor management strategies that look to provide positive alternatives such as improvements in car and van pooling support, general purpose lanes, and transit services. Congestion pricing projects usually already include these alternatives. Transit subsidies and/or service improvements, car or van pool incentives or support facilities, or other alternatives may be considered as mitigation measures for impacted EJ populations and other communities.

In addition to affordability concerns, tolling and congestion pricing can impact traffic patterns. This happens because some drivers will choose to avoid roads with a higher cost. Traffic diversion can generate traffic problems in other areas and must be analyzed along with other impacts of road pricing. It is possible that this shift in route choice may also negatively affect minority and low-income populations if the congested traffic goes through their communities. Practitioners should consider whether road pricing would change traffic patterns in a way that leads to air quality, noise, and/or safety problems for nearby communities, including minority and low-income communities.

---

<sup>33</sup> [FHWA Guidebook for State, Regional, and Local Governments on Addressing Potential Equity Impacts on Road Pricing \(2013\)](#)



Where possible, the consideration of tolling alternatives should be identified as part of the funding package for a transportation facility during the transportation planning process. As the project is selected for implementation through the use of federal-aid funds, practitioners should evaluate the potential impacts on minority and low-income communities as part of the National Environmental Policy Act (NEPA) process. Practitioners should also identify and assess mitigation strategies to help avoid disproportionately high and adverse impacts.

For more information on how to develop an effective and publicly-supported road pricing program, see the following resources:

- [National Cooperative Highway Research Program \(NCHRP\) Report 686: Road Pricing: Public Perceptions and Program Development](#)
- [FHWA Guidebook for State, Regional, and Local Governments on Addressing Potential Equity Impacts on Road Pricing](#)

### ***Example: Considering Equity in Tolling Plans***

One State department of transportation (DOT) took the following steps to involve the public, consider equity, and establish appropriate mitigation measures for a tolling project. Other agencies may consider these and other strategies, as appropriate, to support EJ and other aspects of social equity:

- Establish a tolling implementation committee to involve the public and advise the legislature.
- Task the tolling committee with demonstrating the overall need for tolling and the benefits for users of all income levels.
- Collaborate with the regional transit agency to increase express bus service within the corridor for several months leading up to the start of tolling.
- Provide traffic mitigation funds to local agencies to address the impacts of the expected traffic diversion.

### ***Work Zones and Planned Special Events***

Safety—for both workers and travelers—is an important consideration for practitioners when addressing temporary changes to the transportation system, such as work zones and planned special events. These temporary changes often impact nearby businesses, transit routes, and emergency responders. If this may result in disproportionately high and adverse effects on minority and low-income populations, practitioners must assess and then avoid, minimize, or mitigate the impacts. Examples of mitigation may include, but are not limited to, the following: providing assistance to local businesses that serve minority and low-income communities, including those with Limited English Proficiency (LEP), providing alternate access to transit stops that will be obstructed, and providing temporary parking to offset parking restrictions.

Practitioners should be aware of the equity implications of relying on social media and other technologies to alert users of temporary changes to the transportation system, considering that not all

populations may have these technologies. One method for addressing this is to provide alternative formats that the public can use to obtain information, such as an automated telephone line. Similarly, the language and location of variable message signs may render them inaccessible for certain populations. To address these common challenges, practitioners should mark detours, evacuation routes, and other temporary changes to the transportation system by providing clear signage in locations accessible to all, like bus stops, and in the most commonly used languages in the area.

### ***Signal Phasing and Timing***

Signal phasing and timing can strengthen or weaken the fabric of a community. For example, children who cross a major roadway to attend school are influenced by the length and frequency of the crossing phase. Practitioners should consider signal phasing as a tool to improve livability and safety for minority and low-income communities.

## **Freight Considerations**

### ***Introduction***

Freight movements may offer many positive benefits to communities—including jobs, increased tax revenue, and support for the growing “just in time” demands of consumer markets. Freight may also have negative effects on communities, such as noise, light, and air pollution; truck parking and safety concerns; and congestion impacts. Impacts are most intense in close proximity to freight facilities and corridors, which can mean that disadvantaged populations may suffer a large share of negative environmental impacts if they are located near freight yards and/or corridors.

The Federal Highway Administration (FHWA) recommends that practitioners include freight considerations in land-use policies, because freight influences environmental, economic, and social factors in a community. FHWA funding recipients should analyze and address any potential for disproportionately high and adverse impacts on minority and low-income populations on the program and/or project level.

#### ***Practitioner***

In this document, the term “practitioner” refers to the agency staff directly conducting an activity or project, which in most cases will be FHWA funding recipients, such as State departments of transportation and metropolitan planning organizations. FHWA primarily serves in an oversight and advisory role.

### **Key Questions to Consider for EJ in Freight**

FHWA staff should consider the following key questions related to EJ in freight. These are not intended to be prescriptive or exhaustive, and they may not be applicable to every situation:

- Have practitioners used geospatial analysis to assess the equity of freight impacts?
- Have practitioners proactively involved minority and low-income communities to discuss the benefits and burdens of freight and ways to mitigate harmful effects?



### ***Data Collection and Analysis***

Practitioners can use geographic information systems (GIS) to map freight data along with demographic data to determine whether minority or low-income communities have experienced or will experience disproportionately high and adverse impacts from freight movements. Freight movements may impact many areas, which include but are not limited to, the following:

- Land-use patterns.
- Noise and vibration.
- Light pollution – Lights from trains and trucks may increase the brightness of the night sky and shine into residents’ windows, disrupting the sleep of residents who live along railroads and truck routes.
- Air quality and odors.
- Safety – At-grade crossings increase auto delays and safety concerns, and slow emergency response vehicles. Large truck crashes may also cause injuries, fatalities, and hazardous materials incidents.
- Employment – Freight centers near low-income communities often hire a portion of local residents, providing competitive pay and easy access to work.

When considering EJ in the context of freight decisions, practitioners can use many of the same data sources described in the “Data Collection and Analysis” section on page 12. Practitioners should also consult freight-specific data sources, such as:

- [FHWA Freight Analysis Framework](#) – Integrates data from a variety of sources to create a comprehensive picture of freight movement among States and major metropolitan areas by all modes of transportation.
- [U.S. Census Bureau Commodity Flow Survey](#) – Provides data on the movement of goods in the United States. The U.S. Census Bureau conducts this survey every 5 years, and FHWA incorporates the latest available data into its freight tools, such as the Freight Analysis Framework Data Tabulation Tool, described in the bullet point above.

### ***Public Involvement***

Practitioners should proactively involve communities to discuss the benefits and burdens of freight and ways to mitigate potential harmful effects. The FHWA [Freight and Land Use Handbook](#) suggests several strategies to involve community groups and residents. These include:

- **Create a neighborhood investment fund** – These funds, created by freight carriers or freight generating industries, can facilitate local economic development and open lines of communication between freight operators, local officials, and surrounding communities.
- **Hire locally** – Developing an on-site workforce composed of local residents supports the local economy and improves relations with community members.

- **Establish forums for comments and questions** – Websites, phone lines, and other avenues can provide opportunity for community input and keep local freight operators accountable for addressing issues.
- **Add community stakeholders to metropolitan planning organization (MPO) freight committees and working groups** – Many MPOs have formed freight committees and task groups. However, these usually focus on involving the freight community and do not consider the public or large businesses that are primary shippers/receivers. Including community stakeholders can help to consider and address the needs of communities, including those of minority and low-income populations.

### ***Resources***

FHWA provides a number of freight resources that may be relevant to EJ, including the following:

- [FHWA Freight Management and Operations Website](#) – Offers research insights, analytical tools and data, and guidance on funding opportunities.
- [FHWA Freight Planning Website](#) – Provides a variety of resources to help practitioners make informed decisions regarding freight planning at the State and local levels.
- [FHWA Freight and Land Use Handbook \(2012\)](#) – Provides transportation and land-use planning practitioners in the public and private sectors with tools and resources to assess the impacts of land-use decisions on freight movements as well as the impacts of freight development and growth on land-use planning goals.
- [FHWA Freight and Air Quality Handbook \(2010\)](#) – A resource for State departments of transportation (DOTs), MPOs, FHWA, and other public- and private-sector organizations to use in developing solutions to freight and air quality challenges.

Practitioners can reference these resources, along with this document, when considering the implications of freight decisions for minority and low-income populations.



## EJ in Safety

### Introduction

This section discusses transportation safety, a priority for all individuals and communities. Federal Highway Administration (FHWA) staff can use safety measures and tools to understand and address environmental justice (EJ) issues.

#### **Practitioner**

In this document, the term “practitioner” refers to the agency staff directly conducting an activity or project, which in most cases will be FHWA funding recipients, such as State departments of transportation and metropolitan planning organizations. FHWA primarily serves in an oversight and advisory role.

### Key Questions to Consider for EJ in Safety

FHWA staff should consider the following key questions related to EJ in safety. These are not intended to be prescriptive or exhaustive, and they may not be applicable to every situation:

- Have practitioners assessed whether plans and projects will have adverse safety impacts on minority and low-income communities?
- Have practitioners considered EJ as a factor in prioritizing safety improvements?
- Have practitioners identified and addressed communication barriers to ensure that minority and low-income communities are aware of safety issues and can provide input?
- Have practitioners supplemented safety data with inclusive public involvement in determining where safety improvements would be most effective for minority and low-income populations and for all populations in the study area?

Transportation practitioners can improve safety through a comprehensive “4 E” approach:

- Engineering/infrastructure improvements.
- Educational approaches, such as programs that promote safety awareness.
- Enforcement activities.
- Emergency response.

Practitioners can address safety through multiple disciplines, such as planning, design, construction, and maintenance and operations. The [FHWA Office of Safety](#) promotes programs and technologies to improve the safety performance of the Nation’s roadways. The FHWA Office of Safety partners with the FHWA Office of Planning to offer resources on [Transportation Safety Planning](#). The [National Highway Traffic Safety Administration \(NHTSA\)](#) offers technical assistance on behavioral aspects of safety.

### Requirements

Title 23 United States Code (U.S.C.) 148 requires every State DOT to develop and regularly update a Strategic Highway Safety Plan (SHSP) that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. The SHSP is based on a data-driven analysis that evaluates where State departments of transportation (DOTs) need to make safety improvements. It outlines goals, objectives, and emphasis areas for implementing improvements. The State DOT is responsible for developing the SHSP with input from local, State, Federal, Tribal, and private-sector stakeholders. FHWA provides technical assistance to State DOTs as they update their SHSPs. Title 23

U.S.C. 134(h) and 135(d) require State DOTs and metropolitan planning organizations (MPOs) to consider eight planning factors, including one on safety: “increase the safety of the transportation system for motorized and non-motorized users.” Where appropriate, agencies should address EJ issues in developing SHSPs and in planning for safety improvements.

## Recommendations

Safety is important for everyone, and practitioners should consider EJ as part of safety analyses. Depending on the context, there may be safety issues that are particularly relevant for minority or low-income populations. For example, in areas where minority or low-income populations are dependent on transit, safety and security amenities (such as lighting, emergency call boxes, or shelters) at transit stations, and especially bus stops, may be important considerations. In areas where minority or low-income populations are dependent on walking as a primary mode of transportation, improvements to pedestrian infrastructure could dramatically improve safety.

Practitioners should educate the public about behavioral changes that may minimize safety risks, such as waiting for the “walk” signal before crossing streets or wearing bright clothing when walking or cycling near heavily trafficked streets at night. Practitioners should also communicate with, educate, and empower communities to engage with local, State, and Federal agencies on safety issues. Cultural, literacy, and language barriers may prevent low-income and minority individuals from participating in community meetings about safety, so practitioners may need to make special efforts to involve them. The FHWA Office of Safety provides a variety of resources to assist with this outreach. As one example, the Office of Safety provides educational flyers and brochures for pedestrians and bicyclists, including [Spanish language materials](#). For additional resources please consult the [FHWA Office of Safety website](#). The National Center for Safe Routes to School also provides a variety of resources, including a resource guide on [Implementing Safe Routes to School in Low-Income Schools and Communities](#).

Coordination of land use and transportation planning also provides opportunities to enhance safety for all users. Matching the characteristics of the transportation system to the needs and characteristics of surrounding land uses helps to avoid conflicts and better meets the needs of the community. [Context sensitive solutions](#) is one way to address this. The concept is described in more detail in the final section of this document: “Changing Context: Relationship of EJ to Other Concepts and Movements.”

## Data Collection and Analysis

A combination of crash data, roadway data, and demographic information can help practitioners understand where and why incidents occur and identify where safety improvements would be most effective. The FHWA Office of Safety provides a variety of data resources through the [FHWA Roadway Safety Data Program](#). In addition, NHTSA provides a variety of data resources through the [NHTSA National Center for Statistics and Analysis](#). Practitioners should consult the [FHWA Office of Safety](#) and [NHTSA](#) websites for additional resources and information on safety.

Practitioners may be able to make inferences about the social equity of safety conditions by using geospatial analysis tools. For example, practitioners may use geographic information systems (GIS) to juxtapose the locations of safety incidents with demographic data. However, it can be difficult to definitively assess whether safety conditions are equitable because crash records usually do not include demographic data such as race, ethnicity, country of origin, or income. For that reason, practitioners should supplement safety data sources with inclusive public involvement. Residents can help to identify potential safety issues where countermeasures may be appropriate.



# Consultation with Federally Recognized Tribal Governments

## Introduction

The [Federal Highway Administration \(FHWA\) Environmental Justice \(EJ\) Order 6640.23A](#) identifies American Indian and Alaskan Native communities as populations that the agency should protect from “disproportionately high and adverse human health or environmental effects of programs, policies, and activities.” Acknowledging that FHWA projects may impact sovereign Tribal Nations directly or indirectly, this section discusses the need to consult with the Governments of federally recognized Tribes, establish trust, and integrate the information gathered during consultation into EJ analysis.

### ***Non-Federally Recognized Tribes***

This section only addresses Government-to-Government consultations with federally recognized Tribes. However, American Indians and Alaskan Natives that are not part of federally recognized Tribes are still protected populations according to the FHWA EJ Order. The rest of this document provides practitioners with a framework for involving and addressing the needs of those individuals.

## Key Questions for Consulting with Tribal Governments

FHWA staff should consider the following key questions in consulting with Tribal Governments. These are not intended to be prescriptive or exhaustive, and they may not be applicable to every situation:

- Have FHWA staff and funding recipients accorded Tribal Governments the respect due to a sovereign nation?
- Have FHWA funding recipients worked with Tribes to identify times and locations for meetings that are convenient for the Tribal representatives?
- Have FHWA staff and/or funding recipients considered potential effects on Tribal sacred sites, properties of religious and cultural significance, or natural resources of concern?

FHWA is committed to recognizing Tribal sovereignty, including consulting and working with federally recognized Tribes on a Government-to-Government basis to plan, develop, and implement projects that positively affect Tribes and Tribal communities. FHWA is also committed to building relationships between the Federal Government, Tribal Governments, State departments of transportation (DOTs), metropolitan planning organizations (MPOs), and local governments. For additional information on Tribal Governments and transportation, visit the [FHWA Tribal Transportation Planning Website](#) and the Tribal Issues section of the [FHWA Environmental Review Toolkit](#).

## Requirements

The U.S. Constitution, as well as various Supreme Court decisions, statutes, executive orders, and policies, require FHWA and other Federal agencies to consult with Tribes regarding policy and regulatory

matters.<sup>34</sup> The [U.S. Department of Transportation \(USDOT\) Tribal Consultation Plan](#) provides guidelines for Tribal consultation in actions that may affect Tribes.

According to 23 United States Code (U.S.C.) 134 and 23 U.S.C. 135, the responsibility to ensure Tribal consultation in the planning process lies with the entity responsible for planning, whether an MPO, rural planning partner, or the State DOT. However, FHWA is ultimately responsible for ensuring that Tribal consultation occurs in subsequent phases of project development. In instances where federally recognized Tribes agree, FHWA may delegate certain activities to other parties such as a State DOT. However, this delegation cannot include the responsibility for Government-to-Government Tribal consultation.

During project development, Section 106 of the National Historic Preservation Act of 1966 ([16 U.S.C. 470f](#)) also requires Federal agencies to make a reasonable and good faith effort to identify federally recognized Tribes that they should consult through the [Section 106 consultation process](#). Federal agencies must consult with federally recognized Tribes; consider whether proposed actions may impact historic properties of religious and cultural significance to Tribes; and consider measures to avoid, minimize, or mitigate any adverse effects to those properties. The Section 106 consultation process is not the same as an EJ analysis but EJ may be relevant for Section 106 and vice versa. For additional information on Tribal consultation in the context of Section 106, use the following links:

- U.S. Advisory Council of Historic Preservation's [Consultation with Indian Tribes in the Section 106 Review Process: A Handbook](#)
- [FHWA Section 106 Tribal Consultation Questions and Answers](#)

The Tribal Transportation Program (TTP, formerly the Indian Reservation Roads Program) regulations at [25 Code of Federal Regulations \(CFR\) 170](#) require the Department of Interior's Bureau of Indian Affairs (BIA), FHWA, and State and local agencies to incorporate nondiscrimination and EJ principles as integral program elements of the TTP, and to consult with Tribes in the initial stages of program development to "identify potential discrimination and to recommend corrective actions to avoid disproportionately high and adverse effects on Tribes and Native American populations." According to those regulations, such effects may include, but are not limited to, the following:

- Impeding access to Tribal communities or activities.
- Creating excessive access to culturally or religiously sensitive areas.
- Negatively affecting natural resources, trust resources, Tribal businesses, and religious and cultural sites.
- Harming culturally important plants and animals.
- Impairing the abilities of Tribal members to engage in commercial, cultural, and religious activities.

---

<sup>34</sup> [E.O. 13175](#); [Johnson v. M'Intosh](#) 21 U.S. 543 (1823); [Cherokee Nation v. Georgia](#), 30 U.S. 1 (1831); [Worcester v. Georgia](#), 31 U.S. 515 (1832); 40 CFR [1501.2](#) and [1501.7](#)



### ***Consultation in Planning***

Most Tribal Governments create their own transportation improvement programs (TIPs) for proposed improvements on Tribal lands based on funding they receive directly from the Federal Government. The Secretaries of the U.S. Department of Transportation and Department of Interior approve these TIPs, and then State DOTs and MPOs incorporate the relevant components, without changing them, into their respective TIPs. Some Tribes do not create their own TIPs, but even those that do not may still have an interest in the TIP developed by a neighboring State or MPO. Tribes only work with MPOs and State DOTs on regionally significant projects. Title 25 CFR 170 directs Tribal Governments, State DOTs, and MPOs to consult with each other about regional projects to ensure that Tribal TIPs incorporate any changes to roads on reservations or trust lands projects.<sup>35</sup>

If it appears that discrimination or adverse impacts occur during transportation planning, [25 CFR 170.111](#) states that Tribes should first “take reasonable steps to resolve the problem directly with the State or local Government involved and then contact the BIA, FHWA, or the Federal Transit Administration (FTA), as appropriate, to report the problem and seek assistance in resolving it.” During subsequent phases of project development, if it appears that disproportionately high and adverse impacts will likely occur, the project sponsor or the Tribe(s) should notify FHWA and FHWA should consult with the Tribe(s) and other parties to resolve the issues.

### ***Consultation in Subsequent Phases of Project Development***

As early as possible in project development, FHWA shall act in accordance with the principles of Section 106 by consulting with Tribes to identify sacred sites, properties of religious and cultural significance, and natural resources of concern on or off Tribal lands. While FHWA is responsible for Government-to-Government consultation, typically the State DOT or MPO will handle some of this step. For example, the FHWA Division Office might initiate consultation efforts with a letter to the Tribal Government and the State DOT or MPO might then continue with day-to-day consultation activities. The State DOT or MPO should then evaluate potential impacts of the undertaking on those resources.<sup>36</sup> If a Tribe elects to provide culturally sensitive information, the Tribe does not have to share further details. There is no requirement that a Tribe provide information that it deems sensitive.

## **Recommendations**

When interacting with Tribal Governments, agencies should respect that federally recognized Tribes are sovereign nations and have a unique legal relationship with the United States as set forth in the Constitution of the United States, treaties, statutes, and court decisions. Therefore, interacting with Tribal Governments is not the same as interacting with a local government or with the public. All honor and respect accorded to the Tribal Governments should be conveyed in the Government-to-Government relationship. While the over-arching relationship of the Federal Government to a Tribal Government is that of a sovereign nation to a sovereign nation, States and local Governments can and do have Government-to-Government relationships with Tribes when no Federal nexus exists. In the State and metropolitan transportation planning processes, the responsibility to consult with federally recognized Tribes falls to the State DOTs and MPOs.

---

<sup>35</sup> [25 CFR 170.110; 25 CFR 170.415\(3\); and 25 CFR 170.428](#)

<sup>36</sup> [FHWA Planning Processes: Tribal Consultation](#)

To involve Tribal Governments in the planning process, FHWA planners should encourage consensus building between State and local agencies, and Tribal representatives about all aspects of the transportation planning process, up to and including document review times and the location of planning meetings. Jointly agreeing on all aspects of the planning process in a State or MPO region will promote full participation of Tribal representatives, especially those who reside in rural areas.

As with any group of people, there might be differences of opinion within a Tribe or among Tribes with overlapping areas of interest. Therefore, consultation should begin as early as possible to allow adequate time to identify and meaningfully consider such differences—consultation should be a timely exchange of information and discussion. Training in conflict resolution or mediation may help address controversy regarding places or properties of religious or cultural significance to one or more Tribes. This training could include FHWA National Highway Institute Trainings [\*Practical Conflict Management Skills for Environmental Issues\*](#) or [\*Beyond Compliance: Historic Preservation in Transportation Project Development\*](#). FHWA, the State DOT, and/or local transportation agencies should also ask federally recognized Tribes if any resources of cultural and/or religious significance on non-Tribal lands (private or publicly owned) should be considered in the planning and project development processes. This is particularly important where burials or funerary objects might be present.

## Ensuring Nondiscrimination Compliance on a Program Level

### Introduction

This section discusses the Federal Highway Administration (FHWA) Title VI Program, which is a critical tool for ensuring environmental justice (EJ) compliance. Executive Order 12898 emphasizes that Federal agencies should use existing laws and programs to achieve EJ, including Title VI of the Civil Rights Act of 1964 (Title VI). The FHWA Title VI **Program** is broader than the Title VI **statute** and addresses other nondiscrimination statutes and authorities, including Executive Order 12898 on EJ. The FHWA Office of Civil Rights oversees FHWA's Title VI Program, which ensures that FHWA policies, programs, and activities do not discriminate based on race, color, national origin, income, sex, age, disability, or limited English proficiency (LEP).

### Recipient

In this section, the term “recipients” refers to the agencies that receive funding from FHWA, whether directly or indirectly. “Sub-recipient” is more specific and refers to an agency that receives FHWA funding indirectly.

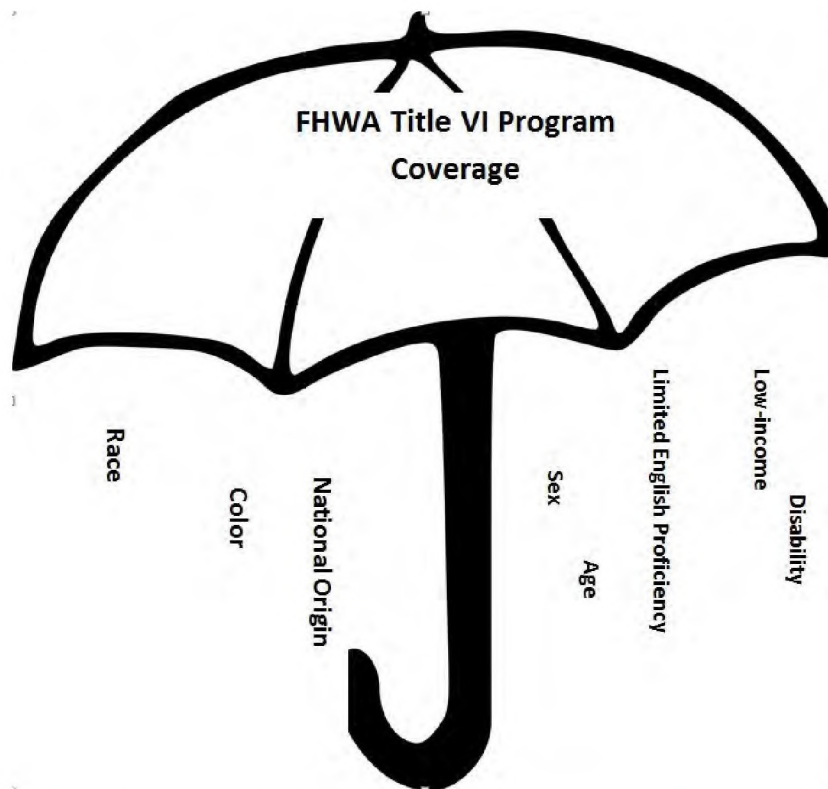


Figure 9: The FHWA Title VI Program is broader than the Title VI statute and encompasses other nondiscrimination statutes and authorities under its umbrella, including Executive Order 12898 on EJ.



## Key Questions for Ensuring Nondiscrimination on a Program Level

FHWA staff should consider the following key questions in using the FHWA Title VI Program to advance EJ. These are not intended to be prescriptive or exhaustive, and they may not be applicable to every situation:

- Have recipients of FHWA funds considered how to most effectively use the data collection and reporting requirements of the Title VI Program to gather information in support of EJ?
- Have recipients considered how the Title VI Program can strengthen and support the concepts presented in the other sections of this document?

The FHWA Title VI Program uses several tools to ensure nondiscrimination. Every recipient of FHWA financial assistance must submit a Title VI Program Implementation Plan that describes how the recipient reviews program areas to identify disparate impacts on the public that may constitute discrimination. The FHWA Office of Civil Rights conducts reviews of recipient State departments of transportation (DOTs) to ensure compliance with these requirements and to strengthen programs containing deficiencies. FHWA funding recipients should consider how the Title VI Program can support EJ implementation.

## Requirements for Recipients

### *Program Area Reviews*

The FHWA Title VI Program regulation, 23 Code of Federal Regulations (CFR) Part 200, requires State DOTs to conduct annual reviews of all pertinent program areas to determine the effectiveness of activities designed to ensure nondiscrimination. If the recipient determines that a program causes disproportionately high and adverse impacts to a given population group relative to other population group(s), then the recipient must analyze the disparate impact. The analysis should seek to demonstrate that the disparate impact is nondiscriminatory in nature and that less discriminatory alternatives were not available. The Federal program areas may include: Planning, Environment, Design, Right-of-Way, Contract/Contract Administration, Construction, Maintenance and Operations, Safety, Research, and Training.

To inform the program area reviews, the Title VI regulation further requires recipients to collect demographic and economic data about their populations, identify trends and impacts associated with their program areas, and determine whether one or more of the population groups has borne disproportionately high and adverse impacts. Regular data collection for the Title VI Program can contribute to the EJ process by informing data collection during planning and project development.

### *Assurances*

FHWA requires every recipient of FHWA financial assistance to sign a document subjecting them to the Standard Title VI Assurances and Nondiscrimination Provisions (Assurance). EO 12898 is one of the numerous statutory, regulatory, and executive authorities to which the Assurance binds its signatories. The reference to “minority” under EO 12898 is included as a protected group under Title VI as “race.” The Assurance applies to all of the recipient’s program areas that impact or involve the public, and it prohibits discrimination in the selection and retention of contractors and subcontractors for Federal-aid highway projects. Specifically, the Assurance requires recipients and sub-recipients to insert



nondiscrimination language into all contracts. Recipients are ultimately responsible for ensuring that all sub-recipients include this language. This requirement can help practitioners ensure EJ compliance in design, construction, and other phases of project development.

### ***Monitoring of Sub-recipients***

Each recipient of FHWA funds is responsible for monitoring the Title VI and nondiscrimination compliance of its sub-recipients, which includes: ensuring sub-recipients provide Assurances (as described above), conducting process and program reviews, and collecting and analyzing data. Each sub-recipient should identify a Title VI Program coordinator and develop a Title VI Program Nondiscrimination Plan patterned after the recipient's plan. The recipient should require sub-recipients to report on an annual basis to assist the recipient in determining whether the sub-recipient is in compliance with Title VI and other nondiscrimination requirements. The reporting structure of the Title VI Program can help FHWA and funding recipients to ensure accountability for EJ compliance.

### ***Notifications***

Recipients and sub-recipients are responsible for providing Notifications to Beneficiaries detailing their Title VI and other nondiscrimination obligations and notifying the public of the protections against discrimination that Title VI and other nondiscrimination requirements afford to them. Recipients are ultimately responsible for ensuring that all sub-recipients follow this requirement. Recipients can use this requirement to help improve communication with underserved populations, such as low-income or minority individuals.

## **FHWA Title VI Compliance Review Program**

The FHWA Title VI regulation requires that FHWA conduct compliance reviews of all recipients, helping recipients strengthen their programs by maintaining compliance with Title VI and other nondiscrimination requirements. The FHWA Office of Civil Rights helps to enforce EJ through this program.

Before a compliance review, the Office of Civil Rights provides the local Division Office with information about processes, compliance requirements, and a list of questions that the Office of Civil Rights will ask during the review. The Division Office works alongside recipients throughout the whole process to keep them informed and involved. FHWA makes this information available to each recipient throughout the review.

## Changing Context: EJ in Relation to Other Concepts and Movements

### Introduction

This section describes some initiatives and funding opportunities related to environmental justice (EJ). The Federal Highway Administration (FHWA) is committed to finding ways to integrate EJ into other ongoing initiatives. The topics in this section include the following:

- Livability
- Nonmotorized Transportation
- Context Sensitive Solutions
- Health in Transportation
- Sustainability
- Ladders of Opportunity and Economic Development
- Transportation Investments Generating Economic Recovery Grant Program
- Transportation Alternatives Program
- Recreational Trails Program
- PlanWorks

#### ***Practitioner***

In this document, the term “practitioner” refers to the agency staff directly conducting an activity or project, which in most cases will be FHWA funding recipients, such as State departments of transportation and metropolitan planning organizations. FHWA primarily serves in an oversight and advisory role.

### Key Questions on EJ in Relation to Other Concepts and Movements

FHWA staff should consider the following key questions in reflecting on this section. These are not intended to be prescriptive or exhaustive, and they may not be applicable to every situation:

- What opportunities are there for advancing EJ through other programs and initiatives?
- How does EJ relate to and support the concepts described in this section?

### Livability

At the U.S. Department of Transportation (USDOT), livability focuses on tying the quality and location of transportation facilities to broader opportunities; such as, access to good jobs, affordable housing, quality schools, and safe streets. FHWA promotes livable communities by funding transportation projects and building practitioner capacity. Social equity is an important component of livability. To access more information and resources on livability, visit the [FHWA Livability website](#).

FHWA works within the [Interagency Partnership for Sustainable Communities \(PSC\)](#) to coordinate Federal investments in support of livable communities. The PSC is a partnership between three Federal agencies: USDOT, the U.S. Department of Housing and Urban Development (HUD), and the U.S. Environmental Protection Agency (EPA). The PSC developed six principles to guide livability efforts:

- Provide more transportation choices.
- Promote equitable, affordable housing.
- Enhance economic competitiveness.



- Support existing communities.
- Coordinate policies and leverage investment.
- Value communities and neighborhoods.

The PSC created Team EJ, a working group focused on the connections between EJ, health, and sustainable communities. Co-chaired by EPA's Office of Environmental Justice and HUD's Office of Sustainable Housing and Communities, Team EJ strives to understand how EPA, HUD, USDOT, and the Centers for Disease Control and Prevention (CDC) can integrate EJ, health, and sustainability goals and use existing resources to address EJ needs. Toward that end, Team EJ organized relevant information on the [sustainability page of the EPA EJ website](#), compiled a [list of mapping tools](#) to identify assets and hazards, and published a [lexicon](#) that shows how each agency defines relevant terms.

### ***Example: Reintegrating Access-Controlled Highways into the Urban Fabric***

Across the Nation many communities have expressed interest in eliminating access-controlled highways in urban areas and reintegrating those roads into the urban fabric. FHWA's involvement with this effort to date has focused on withdrawing routes from the [Interstate Highway System](#), although the trend is not limited to Interstates. In many cases, State DOTs propose to convert the former highway segments into boulevards (walkable, low-speed, divided roadways designed to carry both through and local traffic). Many highways traverse low-income and minority neighborhoods, so this trend is particularly relevant for EJ. Such transformations can bring both benefits and burdens. For example, some may welcome the boulevard and the potential resulting increase in economic and recreational opportunities. Others may prefer the original highway and view it as a vital cross-town route that improves mobility. As with any transportation action, it is important that practitioners involve all stakeholders and strive to balance priorities as equitably as possible before reaching a decision.

## **Nonmotorized Transportation**

By providing safe and convenient facilities for multiple modes, a community can ensure that all residents have access to transportation. Many individuals do not have an option to drive and may rely on alternative forms of transportation, such as bicycling and walking. The Pedestrian and Bicycle Information Center provides equity information on its [social justice](#) page. The League of American Bicyclists provides a toolkit, reports, and other resources related to equity as part of its [equity initiative](#).

## **Context Sensitive Solutions**

Context sensitive solutions (CSS) is a collaborative, interdisciplinary, holistic approach that involves all stakeholders to develop transportation projects that fit a community's setting. CSS is both a process and product, and it integrates project, agency, and community priorities into decisionmaking. The CSS principles can help agencies promote EJ. For example, one CSS strategy is to "use a full range of communication strategies." This is important for social equity, as many underserved populations may be difficult to reach. For more information on CSS, visit the [FHWA CSS website](#).



## Health in Transportation

Transportation can affect human health in several ways including: safety; air quality; physical activity; access to goods, services, and job opportunities; and noise. [Executive Order \(EO\) 12898](#) states that each Federal agency shall identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. Practitioners should develop transportation options that promote and improve human health and ensure that programs do not impose a disproportionately high and adverse human health effect on minority and low-income populations. For more information on health and transportation, visit the [FHWA Health in Transportation website](#).

## Sustainability

FHWA defines sustainability according to the triple bottom line, which includes social, economic, and environmental considerations. EJ is an important consideration for all three branches of the triple bottom line. For more information on the human environment and sustainability, view section 3.4 of the [FHWA Sustainability Report](#). For general information on sustainability, visit the [FHWA Sustainable Highways Initiative website](#). FHWA developed the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST) to help transportation agencies measure their performance on sustainability and target improvements. INVEST includes several criteria that relate to social equity, such as a criterion on [access and affordability](#). FHWA also provides a variety of resources related to climate change. The [adaptation page](#) of the FHWA climate change website may be especially relevant for EJ because the 2014 Intergovernmental Panel on Climate Change [Fifth Assessment Report](#) indicates that low-income populations and minority populations may be particularly vulnerable to climate change impacts.

## Ladders of Opportunity and Economic Development

[Ladders of Opportunity](#) is a White House initiative that builds economic opportunities for low-income populations working hard to reach the middle class. The USDOT is committed to building ladders of opportunity by providing affordable transportation options and by improving residents' quality of life through access to education and employment opportunities. The USDOT recognizes that transportation and economic opportunity are interconnected: transportation costs are the second largest expense for U.S. households, low-income households are less likely to own a car compared to higher income households, and unreliable transit and unsafe streets can interfere with reaching jobs and other essential services. The USDOT and FHWA promote policies and activities that encourage economic development through transportation. This concept is strongly tied to EJ, as transportation has the potential to improve economic opportunities for minority and low-income communities. FHWA offers two tools through the second Strategic Highway Research Program that can help agencies promote economic development:

- [Transportation Project Impact Case Studies \(T-PICS, C03\)](#) is a tool that planners can use to help measure the economic impacts of a transportation project.
- [Tools for Assessing Wider Economic Benefits of Transportation \(C11\)](#) is a suite of spreadsheet-based analysis tools that agencies can use to assess the likely economic consequences of transportation project proposals.

For more information, visit the [FHWA Economic Development website](#).

## Transportation Investments Generating Economic Recovery Discretionary Grant Program

Through the [Transportation Investment Generating Economic Recovery \(TIGER\)](#) discretionary grant program, USDOT provides funding for projects that will improve safety, economic competitiveness, state of good repair, livability, and environmental sustainability. USDOT also evaluates projects based on their expected contributions to economic recovery, innovation, and new partnerships. This program is a potential opportunity to garner resources that can benefit low-income people, minorities, and underserved neighborhoods.

## Transportation Alternatives Program

The [Transportation Alternatives Program \(TAP\)](#) provides funding for programs and projects defined as *transportation alternatives*, including: on- and off-road pedestrian and bicycle facilities; infrastructure projects to improve mobility for non-drivers; community improvement activities; environmental mitigation; recreational trail projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards (walkable, low-speed, divided roadways in urban environments designed to carry both through and local traffic). State DOTs may also use their [Surface Transportation Program \(STP\)](#) funds for these types of projects. State DOTs and large MPOs use a competitive selection process to select TAP projects submitted by eligible entities (local governments, transit agencies, natural resource agencies, school districts, and Tribal governments). Where applicable, State DOTs should consider social equity as a selection criterion. Below are a few examples of programs eligible for TAP funding:

- **Pedestrian and Bicycle Access:** TAP funds can fund the construction of accessible sidewalks and the creation of networks for pedestrians and bicyclists.
- **Safe Routes to School:** Many low-income families rely on walking and bicycling, and greatly benefit from programs to ensure that there are safe routes to school. Activities include building safer street crossings and ensuring access to sidewalks and bicycle lanes. For more information, visit the [FHWA Safe Routes to School website](#).

## Recreational Trails Program

The Recreational Trails Program (RTP) provides funds to States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized uses. Practitioners should consider whether recreational trails are equally accessible to all communities, because there are multiple associated benefits. For example, access to recreational trails can improve public health by promoting active lifestyles. For more information on the RTP, visit the [FHWA RTP website](#). Although the RTP funds are a subset of TAP funds, the RTP functions as a separate program. Most States administer the RTP through a State resource agency.

## PlanWorks

PlanWorks (the beta version was known as *Transportation for Communities – Advancing Projects through Partnerships*, or TCAPP) is a tool that supports collaborative decisionmaking in transportation planning and project development. PlanWorks suggests when and how to involve cross-disciplinary partners and stakeholder groups. PlanWorks can help transportation professionals consider EJ throughout the entire planning and project development process. PlanWorks will be available in 2015 and the FHWA EJ website will link to it when it is available. The beta version of PlanWorks is currently available at: <https://fhwaapps.fhwa.dot.gov/planworks/default.aspx>.



## Conclusion

The Federal Highway Administration (FHWA) remains committed to advancing environmental justice (EJ) through its policies, programs, and activities. The agency hopes that staff will use this document to inform their work and share it with partners to help them understand how to work with FHWA on EJ.

**This document does not establish any new requirements.** FHWA intends to update the document as necessary so that it will remain current. For feedback or questions, please contact one of the FHWA staff listed below in the “Contacts” section.

## Contacts

**Shana V. Baker**

Office of Human Environment  
shana.baker@dot.gov  
202-366-4649

**Brenda C. Kragh**

Office of Human Environment  
brenda.kragh@dot.gov  
202-366-2064

**Harold Peaks**

Office of Planning, Environment, and Realty  
harold.peaks@dot.gov  
202-366-1598

**Candace Groudine**

Office of Civil Rights  
candace.groudine@dot.gov  
202-366-4634

## Appendix

### Other Nondiscrimination Requirements

- Statutes related to metropolitan and statewide transportation planning (23 United States Code (U.S.C.) [134](#) and [135](#) and 49 U.S.C. [5303](#) and [5304](#))
- [Title VI of the Civil Rights Act of 1964](#) (Title VI)
- FHWA Title VI Program Regulation ([23 Code of Federal Regulations \(CFR\) 200](#))
- Americans with Disabilities Act of 1990 ([42 U.S.C. 12101](#) et seq.)
- In States containing nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. [7504](#), [7506](#) (c) and (d))
- Age Discrimination Act of 1975, as amended ([42 U.S.C. 6101](#))
- [Title 23 U.S.C. 324](#) prohibiting discrimination based on sex
- Section 504 of the Rehabilitation Act of 1973 ([29 U.S.C. 794](#)) preventing discrimination against individuals with disabilities
- [Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency](#)

### Resources

#### *Federal Statutes, Regulations, and Executive Orders*

- [Executive Order 12898 on Environmental Justice](#)
- [Title VI of the Civil Rights Act of 1964](#)
- [FHWA Regulations on Title VI \(23 CFR 200\)](#)
- [Title 23 U.S.C. 109\(h\)](#)
- [Uniform Relocation Assistance and Real Property Acquisition Act of 1970](#)
- Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) Regulations ([40 CFR 1500-1508](#))
- FHWA and Federal Transit Administration (FTA) NEPA Regulations ([23 CFR 771](#))
- Statewide and Metropolitan Planning and Programming Regulations ([23 CFR 450](#))

#### *Agency-specific Orders and Guidance*

- [CEQ EJ Guidance under NEPA](#)
- [U.S. Department of Transportation \(USDOT\) EJ Order 5610.2\(a\)](#)
- [USDOT EJ Strategy](#)
- [FHWA EJ Order 6640.23A](#)
- [FHWA Guidance on EJ and NEPA \(2011\)](#)
- [FTA EJ Circular 4703.1](#)
- [Uniform Act Guidance on “Low-Income” Calculations](#)
- [U.S. Department of Health and Human Services \(HHS\) Poverty Guidelines](#)

#### *Reports, Handbooks, and Best Practices*

- [FHWA EJ Emerging Trends and Best Practices Guidebook \(2011\)](#)
- [FHWA EJ and NEPA Case Studies \(2012\)](#)
- [USDOT EJ Case Studies \(2000\)](#)
- [NCHRP Report 710: Practical Approaches for Involving Traditionally Underserved Populations in Transportation Decisionmaking](#)
- [NCHRP Report 532: Effective Methods for Environmental Justice Assessment](#)



- [NCHRP Report 456: Guidebook for Assessing the Social and Economic Effects of Transportation Projects](#)
- [Community Impact Assessment: A Quick Reference for Transportation](#)
- [How to Engage Low-Literacy and Limited-English Proficiency Populations in Transportation Decisionmaking](#)
- [FHWA Guidebook for State, Regional, and Local Governments on Addressing Potential Equity Impacts of Road Pricing](#)
- [NCHRP Report 686: Road Pricing: Public Perceptions and Program Development](#)
- [EPA Report, A Citizen's Guide to Using Federal Environmental Laws to Secure Environmental Justice](#)

### **Websites**

- [FHWA EJ Website](#)
- [Federal Interagency EJ Work Group Website](#)
- [FHWA Civil Rights Website](#)
- [FHWA Public Involvement Website](#)
- [Transportation Planning Capacity Building Public Engagement Website](#)
- [FHWA Tribal Transportation Planning website](#)
- [FHWA Livability Website](#)

### **Sources for Current Information**

- [Human Environment Digest](#)
- Annual EJ [Implementation Report](#) for USDOT

# Promising Practices for EJ Methodologies in NEPA Reviews

*Report of the Federal Interagency  
Working Group on Environmental  
Justice & NEPA Committee*

MARCH 2016

Working  
together towards  
collaborative  
and innovative  
solutions





This material is not intended or offered as legal advice. It is non-binding, informal, and summary in nature, and the information contained herein does not constitute rules or regulations. As such, it is not intended to, does not, and may not be relied upon to create any rights, substantive or procedural, that are enforceable at law by any party, in any criminal, civil, or administrative matter.

**NEPA COMMITTEE PARTICIPANTS**Committee Co-Chairs

- Suzi Ruhl, US EPA
- Helen Serassio, US DOT

Education Subcommittee  
Co-Chairs

- Arthur Totten, US EPA
- Brian Collins, US DOJ

Community of Practice Subcommittee  
Co-Chairs

- Stanley Buzzelle, US EPA
- Andrew Zacker, US HHS

**U.S. Department of Agriculture**Animal Plant Health Inspection Service:

- Wendy Hall, wendy.f.hall@aphis.usda.gov
- Eileen Sutker, eileen.sutker@aphis.usda.gov
- Michelle Gray, michelle.l.gray@aphis.usda.gov
- Fan Wang-Cahill, fan.wang-cahill@aphis.usda.gov
- Phillip Washington, phillip.washington@aphis.usda.gov
- David Bergsten david.a.bergsten@aphis.usda.gov

Forest Service:

- James Smalls, jsmalls@fs.fed.us
- Tasha LoPorto, tloporto@fs.fed.us

**U.S. Department of Energy**

- Denise Freeman denise.freeman@hq.doe.gov
- Eric Cohen\*, eric.cohen@hq.doe.gov
- Steven Miller, steven.miller@hq.doe.gov
- Brian Costner, brian.costner@hq.doe.gov

**U.S. Department of Health and Human Services**

- Andrew Zacher, andrew.zacher@hhs.gov
- Capt. Edward Pfister\*, edward.pfister@hhs.gov
- Laura Annetta\*, laura.annetta@hhs.gov
- Everett Bole, Everett.bole@foh.hhs.gov

**U.S. Department of Homeland Security**

- Lisa Quiveors, lisa.quiveors@hq.dhs.gov
- Jennifer Hass, jennifer.hass@cbp.dhs.gov
- David Reese\*, david.reese@hq.dhs.gov

**U.S. Department of Housing and Urban Development**

- James Potter, james.m.potter@hud.gov

\* Individuals no longer participating on the EJ IWG or NEPA Committee due to retirement or change in duties.



**U.S. Department of the Interior**Bureau of Land Management

- Robert Winthrop, rwinthro@blm.gov
- Thomas Bartholomew\*, tbarthol@blm.gov
- Hilary Zarin, hzarin@blm.gov

Bureau of Reclamation

- Cathy Cunningham, ccunningham@usbr.gov

Fish and Wildlife Service

- Iris Ponsano, iris\_ponsano@fws.gov

National Park Service

- Doug Wetmore, doug\_wetmore@nps.gov

**U.S. Department of Justice**

- Cynthia S. Huber, cynthia.huber@usdoj.gov
- Brian Collins, brian.m.collins@usadoj.gov
- Barbara Marvin, barbara.marvin@usdoj.gov
- Ayako Sato\*, ayako.sato@usdoj.gov

**U.S. Department of State**

- Mary Hassell, hassellMD@state.gov
- Genevieve Walker\*, walkerg@state.gov
- Jill Reilly, reillyJE@state.gov

**U.S. Department of Transportation**

- Helen Serassio, helen.serassio@dot.gov
- Katie Grasty\*, katie.grasty@dot.gov

Federal Transit Administration

- Maya Sarna, maya.sarna@dot.gov
- Faith Hall, faith.hall@dot.gov

Federal Highway Administration

- Harold Peaks, harold.peaks@dot.gov
- Carolyn Nelson, carolyn.nelson@dot.gov
- Sharlene Reed\*, sharlene.reed@dot.gov

**Department of Veteran Affairs**

- Catherine Johnson, catherine.johnson7@va.gov

**U.S. Environmental Protection Agency**Office of Environmental Justice

- Suzi Ruhl, ruhl.suzi@epa.gov
- Stan Buzzelle, buzzelle.stanley@epa.gov

Office of Federal Activities

- Arthur Totten, totten.arthur@epa.gov
- Ellen Athas, athas.ellen@epa.gov
- Julie Roemele, roemele.julie@epa.gov
- Cliff Rader\*, rader.cliff@epa.gov

Regional Offices

- Grace Musumeci, musumeci.grace@epa.gov
- Nikolaus Wirth, wirth.nikolaus@epa.gov
- Reggie Harris, harris.reggie@epa.gov
- Ntale Kajumba, kajumba.ntale@epa.gov
- Alan Walts, walts.alan@epa.gov
- Elizabeth Poole, poole.elizabeth@epa.gov
- Dana Allen, allen.dana@epa.gov
- Thomas Kelly, kelly.thomas@epa.gov

\* Individuals no longer participating on the EJ IWG or NEPA Committee due to retirement or change in duties.

### **U.S. General Services Administration**

- Carol Schafer, carol.schafer@gsa.gov
- Katrina Scarpato, katrina.scarpato@gsa.gov

### **U.S. Nuclear Regulatory Commission**

- Jeffrey Rikhoff, jeffrey.rikhoff@nrc.gov
- Emily Larson\*, emily.larson@nrc.gov

### **White House Council on Environmental Quality**

- Cecilia De Robertis\*, cecilia\_a\_derobertis@ceq.eop.gov

\* Individuals no longer participating on the EJ IWG or NEPA Committee due to retirement or change in duties.



Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

Federal agencies should ensure recipients of federal financial assistance engaged in the NEPA process comply with Title VI in addition to fulfilling the requirements of NEPA. A separate Title VI analysis may be necessary. For guidance on Title VI compliance, consult with your Agency's Office of Civil Rights or the Civil Rights Division of the Department of Justice.

**Table of Contents**<sup>1</sup>

<b>Preface .....</b>	<b>6</b>
<b>I. Meaningful Engagement.....</b>	<b>8</b>
<b>II. Scoping Process .....</b>	<b>12</b>
<b>III. Defining the Affected Environment.....</b>	<b>15</b>
<b>IV. Developing and Selecting Alternatives .....</b>	<b>18</b>
<b>V. Identifying Minority Populations.....</b>	<b>21</b>
<b>VI. Identifying Low-Income Populations.....</b>	<b>26</b>
<b>VII. Impacts Analysis .....</b>	<b>29</b>
<b>VIII. Disproportionately High and Adverse Impacts .....</b>	<b>38</b>
<b>IX. Mitigation and Monitoring.....</b>	<b>47</b>
<b>NEPA and EJ National Training Product.....</b>	<b>51</b>

<sup>1</sup>Similar to the NEPA process itself, the Report is intended to be non-linear in nature. While each section of the document has been arranged to loosely mirror a linear progression, in actual practice, these steps are often overlapping and interrelated.



## Preface

The Federal Interagency Working Group on Environmental Justice (EJ IWG) established the NEPA Committee in 2012 pursuant to the Memorandum of Understanding on Environmental Justice and Executive Order 12898 (2011). The Memorandum identified the National Environmental Policy Act (NEPA) as an area of focus for inclusion in the agencies' environmental justice efforts and directed efforts to "include interagency collaboration." The NEPA Committee seeks to improve the effective, efficient and consistent consideration of environmental justice issues in the NEPA process through the sharing of best practices, lessons learned, research, analysis, training, consultation, and other experiences of federal NEPA practitioners.

*Promising Practices for EJ Methodologies in NEPA Reviews*, an EJ IWG report produced by the NEPA Committee (hereinafter referred to as "Promising Practices Report") represents the professional experience, knowledge, and expertise of the individuals participating in the NEPA Committee. The NEPA Committee (see List of NEPA Committee Participants from ten departments, three agencies, and one White House office) spent almost 48 months researching, analyzing and discussing the interaction of environmental justice and NEPA. The *Promising Practices Report* is a compilation of methodologies gleaned from current agency practices identified by the NEPA Committee concerning the interface of environmental justice considerations through NEPA processes. The EJ IWG and NEPA Committee hope that this compilation will disseminate promising environmental justice practices across the federal government so that we can learn from one another about effective ways to build robust consideration of environmental justice into our NEPA practice. This document draws from existing environmental justice and NEPA Guidance developed by White House Council on Environmental Quality (CEQ) and federal agencies, but is not and should not be considered formal guidance.

The forward-looking promising practices methodologies are derived from examples of actual agency practices that were presented by one or more agencies during the multi-agency NEPA Committee meetings. These examples were used by the NEPA Committee participants to generate approaches that federal agencies can consider for understanding environmental justice in the context of the NEPA process. For purposes of this document, the NEPA Committee looked at instructive examples from current practice, and where helpful or relevant, attempted to extract useful lessons learned from those examples. The NEPA Committee has also produced a National Training Product which includes information on specific examples that align with the *Promising Practices Report* for training purposes.

Accordingly, the *Promising Practices Report* sets forth these promising practices as a way of presenting a variety of methodological approaches and a broad overview of options that may be suitable across various NEPA process scenarios, but not as agency requirements or guidance. Information in the *Promising Practices Report* is intended to provide flexible approaches for agencies as they consider environmental justice in NEPA activities. The *Promising Practices Report* does not establish new requirements for NEPA analysis. It is not and should not be viewed as formal agency guidance, nor is the compilation of promising practices intended to be legally binding or create rights and benefits for any person. It is intended, however, as a way for agencies to compare and improve their methodologies for considering environmental justice now and in the future by applying methods established in federal NEPA practice. In that regard, the joint efforts of the NEPA Committee reflect the community of federal NEPA practitioners who seek to facilitate reasonable consideration of environmental justice within the context of NEPA.

The EJ IWG and NEPA Committee hope that their efforts provide the groundwork for a renewed and dynamic process to advance environmental justice principles through NEPA implementation and thereby promote a more effective, efficient, and consistent consideration of environmental justice during NEPA reviews.



# I. MEANINGFUL ENGAGEMENT

## Guiding Principles

Agencies can be informed by consideration of the following guiding principles:

1. For purposes of consistency with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, the terms “minority populations<sup>2</sup>” and “low-income populations” are used in this document.<sup>3</sup> Within these populations, there are residents, community leaders, and organizations, among others.
2. This document, a compilation of federal NEPA practitioner promising practices, is not formal guidance. It merely provides agencies with recommendations for conducting environmental justice analyses for NEPA reviews. As such, the document is not intended to modify NEPA, the CEQ NEPA regulations, or any agency’s NEPA implementation regulations, or impose any requirements beyond what NEPA and Executive Order 12898 require of agencies.
3. In order to meaningfully engage minority populations and low-income populations and other interested individuals, communities, and organizations, agencies may consider (as appropriate) encompassing adaptive and innovative approaches to both public outreach (i.e., disseminating relevant information) and participation (i.e., receiving community input) since minority populations and low-income populations often face different and greater barriers to engagement.
4. Meaningful engagement efforts with potentially affected minority populations, low-income populations, and other interested individuals, communities, and organizations are generally most effective and beneficial for agencies and communities when initiated early and conducted (as appropriate) throughout each step of the NEPA process.
5. Meaningful engagement efforts for potentially affected minority populations, low-income populations, and other interested individuals, communities, and organizations can play an important role in leveraging agencies’ ability to collect

<sup>2</sup> See “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity” at [https://www.whitehouse.gov/omb/fedreg\\_1997standards/](https://www.whitehouse.gov/omb/fedreg_1997standards/); See also e.g. “U.S. Environmental Protection Agency’s “Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples” at <https://www.epa.gov/tribal/epa-policy-environmental-justice-cj-working-federally-recognized-tribes-and-indigenous>

<sup>3</sup> Agencies use their discretion to define the range of individuals and/or groups to which they will extend environmental justice analyses within their NEPA process. This report recognizes there are a variety of agency approaches to conducting environmental justice analyses and terminology, and so for consistency, it uses the wording, “minority populations and low-income populations” throughout this document.

data used to inform the decision-making process.

6. Maintaining relationships with affected minority populations, low-income populations, and other interested individuals, communities, and organizations throughout the NEPA process via an agency-designated point of contact can be an effective means of facilitating meaningful engagement.
7. Convening project-specific community advisory committees and other established groups to identify potential impacts and mitigation measures (as part of the NEPA review process) comprised in part of potentially affected minority populations and low-income populations can enhance agencies' understanding of the proposed action's potential impacts and alternatives, and can be a valuable public participation strategy, designed to further inform an agency's decision-making process.
8. Providing minority populations and low-income populations, and other interested individuals, communities, and organizations with an opportunity to discuss the purpose and need statement early in the NEPA process can help focus public input. Explaining the purpose and need for agency action to the minority populations and low income populations early in the NEPA process can help focus meaningful engagement (i.e. public outreach and participation) efforts. (See also section 4.1-4.2, p.20)

## Specific Steps

As appropriate, agencies can consider the following actions:

1. Consider conducting early and diligent efforts to meaningfully engage potentially affected minority populations, low-income populations, and other interested individuals, communities, and organizations (as appropriate) when: 1) defining the affected environment; 2) identifying potentially affected minority and low-income populations; 3) assessing potential impacts to minority and low-income populations; 4) assessing potential alternatives; 5) determining whether potential impacts to minority populations and low-income populations are disproportionately high and adverse (See also section 8, p.40); and 6) developing mitigation and monitoring measures. Engaging the community during appropriate key steps in the NEPA review can inform an agency's decision-making process. Agencies may benefit by communicating agency objectives for the proposed activity.
2. Consider identifying and addressing (as appropriate) concerns such as any cultural, institutional, geographic, economic, historical, linguistic, or other barriers to achieve meaningful engagement with potentially affected minority populations, low-income populations, and other interested individuals,



communities, and organizations.

3. Agencies can be informed by soliciting and considering input on the proposed action and alternatives (as appropriate) from each segment of the minority population or low-income population that may potentially be affected (e.g., minority-owned small businesses, low-income transit riders, subsistence fishers).
4. Consistent with applicable requirements, agencies should conduct meaningful engagement efforts and government-to-government consultation efforts (as appropriate) specifically designed to reach indigenous tribal populations and organizations.
5. Throughout each step of the NEPA process (as appropriate) consider the use of electronic communications (e.g., virtual meetings, webinars, social media, Listserv). This method of communication may not be effective for some populations, and its use could be discussed in conjunction with other methods of communication that are viable. Throughout each step of the NEPA process (as appropriate) consider choosing meeting locations, meeting times, and facilities that are local, convenient, and accessible to potentially affected minority populations and low-income populations, and other interested individuals, communities, and organizations, which includes holding some meetings outside of traditional work hours and locations.
6. Consistent with applicable requirements, agencies should prepare NEPA documents in plain, clear language and provide multiple forms of communication (e.g., written, oral, pictorial) to accommodate varied levels of reading proficiency, to facilitate meaningful engagement, and to account for limited English proficiency (LEP). Also, consider (as appropriate) providing interpretation and translation services at public meetings.
7. Consider documenting and explaining the steps taken throughout the NEPA process (as appropriate) for agencies' public outreach and public participation actions or decisions (e.g., how minority populations and low-income populations were identified and how barriers to involvement were identified and addressed). Providing these explanations can be helpful to both an agency's decision-making process and the community's understanding of the NEPA process.
8. Consider providing notice to the public (as appropriate) of the meeting date(s) and time(s) well in advance and through methods of communication suitable for minority and low-income populations (including LEP populations) to accommodate the schedules of minority populations and low-income populations, and other

interested individuals, communities, and organizations. By considering mandatory minimum time requirements between advance notification and meetings that may exist (e.g. time requirements for tribal consultations) an agency can more effectively establish schedules for public notice.

11

## II. SCOPING PROCESS

### Guiding Principles

Agencies can be informed by consideration of the following guiding principles:

1. A broad cross-media perspective of affected resource topics analyzed in the NEPA document (e.g., water resources, land use, air quality) during scoping may help ensure potential human health and environmental effects on minority populations and low-income populations are considered within the scope of the NEPA review. Agencies can be informed by an understanding that minority populations and low-income populations may have increased or unique vulnerabilities from multiple impacts in one or more environmental resource topics or from cumulative impacts, and that the extent of the affected environment may vary for each resource topic addressed in the NEPA document.<sup>4</sup>
2. Agencies may wish to conduct several small scoping meetings for minority populations and low-income populations to foster more participation and substantive discussions (e.g., community members may feel intimidated by large public meetings and formal discussions). If more than 15-20 people are in attendance, breaking into discussion groups may improve the effectiveness of the meeting.
3. Prior to the scoping process, it may be beneficial for agencies to develop a written strategy to identify, notify, and solicit input from potentially affected minority populations and low-income populations for agencies to consider in determining the scope of the NEPA review. Self-identified minority populations and low-income populations can be included in this process.
4. Due to the broad nature of programmatic assessments, certain site-specific environmental justice methodologies described within this section may not be directly applicable. For some programmatic assessments, the scope may be regional or national.

### Specific Steps

As appropriate, agencies can consider the following actions:

1. Consider conducting a preliminary screening analysis at the beginning of the scoping process to determine whether minority populations and low-income

<sup>4</sup> See US EPA, *Factors for Identifying and Addressing Disproportionate Environmental Health Impacts* (2007); *Supplement to American Journal of Public Health*, Vol. 101, No. S1 (Dec 2011).



populations may be present and could be affected by the proposed action. A web-based Geographic Information System tool (e.g., EJSCREEN) can be used to help identify the location and concentrations of minority populations and low-income populations.

2. If the preliminary screening process identifies a potentially affected minority population or low-income population, agencies may benefit by conducting the remainder of the scoping process in consideration of the potential unique characteristics and vulnerabilities of the minority populations and low-income populations.
3. To develop an effective public participation process, agencies can be informed by contacting local community leaders in the potentially affected minority populations and low-income populations (as appropriate). This can help determine the number of public and individual meetings to be scheduled throughout the NEPA process.
4. When federally-recognized tribes are potentially affected by the proposed action, consider seeking government-to-government consultation (as appropriate) with tribal representatives, leaders, or officials, and offer appropriate opportunities for tribal participation (e.g., as a cooperating agency or consulting party).
5. Consider using media suitable to reach potentially affected minority populations and low-income populations (e.g., local newspapers and radio programs word of mouth, churches, civic centers, and other places where people gather in the community) to provide notification about an agency's proposed action and the scoping process (as appropriate).
6. Consider (as appropriate) specifically inviting potentially affected minority populations and low-income populations when conducting public scoping meetings.<sup>5</sup> In some cases it may be useful for agencies to use a neutral third-party (e.g., convener, facilitator, and mediator) familiar with environmental justice issues and with the particular community that is potentially affected by the proposed action. It may also be appropriate to provide an interpreter for public meetings when LEP communities may be affected.
7. Consider conferring with minority populations and low-income populations, and other interested individuals, communities, and organizations (as appropriate) to gather any relevant data on the current and past conditions (e.g., ecological,

---

<sup>5</sup>When convening groups, agencies should note the potential applicability of the Federal Advisory Committee Act (FACA) of 1972 (PL92-463).

aesthetic, historic, cultural, economic, social, or health) of the potentially affected minority populations and low-income populations, in order to inform the NEPA review.

8. Agencies may wish to consider ensuring that agency records clearly reflect the rationale for any scoping determinations made concerning minority populations and low-income populations (e.g., alternatives development, mitigation measures).
9. Consider circulating (as appropriate) a post-scoping summary report/document to potentially- affected minority populations and low-income populations, informing them of the input received and outcomes of the scoping process. Keeping the community informed may assist agencies in receiving meaningful engagement from the community during later stages of the NEPA process.
10. Regardless of the thoroughness of the scoping efforts, if new and significant information that potentially affect minority populations and low-income populations arise later in the NEPA process, in accordance with CEQ regulations (40 CFR 1501.7(c)), agencies should consider modifications to the proposed action, alternatives or potential mitigation measures. As appropriate, agencies may benefit by assessing consistency of the proposed modifications with the purpose and need.



### **III. DEFINING THE AFFECTED ENVIRONMENT**

#### **Guiding Principles**

Agencies can be informed by consideration of the following guiding principles:

1. Consistent with applicable requirements (e.g., 40 CFR §1502.15), as agencies describe the environment of the area(s) to be affected or created by the alternatives under consideration, they can benefit from an understanding of community and population characteristics, location, conditions and other relevant information. One of the important functions of defining the affected environment is to help agencies determine the outer boundaries (i.e., footprint) of each potentially impacted resource topic analyzed in the NEPA document. These boundaries help define the affected area within which potentially impacted minority populations and low-income populations will be considered during the NEPA review. The geographic extent of the affected environment may vary for each resource topic analyzed in the NEPA document.
2. Data (including input from minority populations, low-income populations, and other interested individuals, communities, and organizations) on ecological, aesthetic, historic, cultural, economic, social, or health conditions of minority populations and low-income populations within the affected environment can provide agencies with useful insight into how the community's conditions, characteristics, and/or location can influence the extent of the affected environment. (See also section 2.1, p.14)
3. After considering unique conditions (e.g., ecological, aesthetic, historic, cultural, economic, social, or health) of the potentially affected minority populations and low-income populations, Agencies may wish to consider that the extent of the affected environment maybe larger (or smaller) and differently shaped than the boundaries would have been drawn without the existence of those conditions. The affected environment may also not be contiguous. (See also section 5, p.23)
4. When determining whether a potentially affected minority population or low-income population influences the extent of the affected environment, agencies can be informed by considering the proposed action's: 1) exposure pathways (routes by which the minority or low-income population may come into contact with chemical, biological, physical, or radiological effects); 2) ecological, aesthetic, historic, cultural, economic, social, or health consequences to the community; and 3) distribution of adverse and beneficial impacts from the proposed action. (See also section 5, p.23)



5. Agencies may wish to create a map to delineate the affected environment. A visual depiction of the affected environment may be beneficial to an agency's decision-making process, meaningful engagement efforts, and to the community's understanding of the proposed federal action. (See also section 2, p.14)

## Specific Steps

As appropriate, agencies can consider the following actions:

1. In order to provide a useful comparative context for the consideration of impacts to minority populations and low-income populations, when developing the baseline characterization of the affected environment agencies can be informed by considering for each resource topic in the NEPA document: 1) exposure pathways; 2) direct, indirect and cumulative ecological, aesthetic, historic, cultural, economic, social, or health impacts; and 3) distribution of any potential beneficial or adverse impacts. Agencies may also be informed by consideration of multiple exposures. (See also section 7.1:11, p. 34)
2. Agencies may wish to consider collecting data and information relevant to the three community considerations in Step One (exposure pathways, related impacts, and beneficial impacts distribution) for minority populations and low-income populations within the boundaries of the baseline characterization. Include data related to reasonably foreseeable direct, indirect, and cumulative adverse and beneficial impacts from the proposed federal action on the community. Agencies may also be informed by consideration of multiple exposures. (See also section 8.1:11, p. 42)
3. Agencies may wish to consider data and information from a variety of sources, including, but not limited to: 1) community residents and other interested individuals and organizations; 2) data sets from federal, state, local and tribal governments; 3) peer-reviewed and other scientific literature; and 4) articles in industry and professional journals, popular press, websites, etc.
4. Agencies may wish to consider identifying and describing any unique conditions of the potentially affected minority populations and low-income populations that may be affected by the proposed action, based on data and information collected in Specific Step Two above. Unique conditions may include, but are not limited to: 1) human health vulnerabilities (e.g., heightened disease susceptibility, health disparities); 2) socioeconomic vulnerabilities (e.g., reliance on a particular resource that may be affected by the proposed action, disruptions to community mobility and access as a result of infrastructure development); and 3) cultural vulnerabilities (e.g., traditional cultural properties and ceremonies, fish

consumption practices).

5. Agencies may wish to consider the need to revise the initial baseline characterization (see section 3.2:1) of the affected environment, including revisions to the outer boundaries and pockets of minority populations and low-income populations (as appropriate) using information obtained from specific steps Two through Four. Be mindful that data may suggest the outer boundaries of the affected environment and/or pockets of minority populations and low-income populations may require adjustment.
6. Consider documenting agencies' characterizations of the affected environment in plain language that is easily understood by the general public and the potentially affected minority populations and low-income populations.
7. Consider providing written explanation in the records for agencies' chosen methods and data used to characterize the affected environment (See, e.g., 40 CFR §1502.24)



## **IV. DEVELOPING AND SELECTING ALTERNATIVES**

### **Guiding Principles**

Agencies can be informed by consideration of the following guiding principles:

1. Providing minority populations and low-income populations with a purpose and need statement early in the NEPA process can help focus public input regarding appropriate reasonable alternatives. Reexamination of the potential alternatives in light of relevant public input will, in turn, assist agencies in identifying the range of reasonable alternatives, including a preferred alternative that meets the purpose and need, while addressing concerns of the community. (See also section 1.8, p. 11)
2. Agencies can be informed when reasonable alternatives reflect (as appropriate) a comparable level of detail concerning issues affecting minority populations and low-income populations. If reasonable alternatives have substantial differences in the level of detail of available information concerning impacts to minority populations and low-income populations, agencies may wish to consider generating comparable information about impacts or mitigation to make the comparisons relevant to one another.
3. As agencies explore the range of reasonable alternatives, agencies may consider (as appropriate) whether structuring alternatives to allow a decision to be based on an alternative developed from a combination of elements from multiple alternatives might be appropriate to address impacts to minority populations and low-income populations. Agencies may consider stating in the NEPA document that an alternative developed from the elements of the other alternatives may be considered. In this case, the alternatives may be structured to enable comparison of key elements across the alternatives (e.g., a modular analytic approach) (See, e.g., 40 CFR §1502.14(a)).
4. Providing a discussion of how and why the reasonable alternatives were developed and explaining why additional alternatives supported or proposed by the minority populations and low-income populations may have been eliminated from detailed study can assist agencies with managing potential public confusion or opposition (See, e.g., 40 CFR §1502.14).
5. Agencies can benefit by meaningfully engaging minority populations and low-income populations to provide input on the range and design of potential reasonable alternatives and the purpose and need statement while still under development, or as early as possible in the NEPA process, as well as



encouraging communities to propose their own alternatives. Agencies can advance community engagement by means such as community advisory committees, public workshops, and individual and community-wide meetings.<sup>6</sup>

6. The identification of a disproportionately high and adverse impact to a minority population or low-income population can heighten agencies' attention to identifying reasonable alternatives that could mitigate the adverse impact, and using community input into agencies' development of mitigation measures.

## Specific Steps

As appropriate, agencies can consider the following actions:

1. Consistent with applicable requirements provide minority populations and low-income populations with an opportunity to provide input during agencies' development of the purpose and need statement and proposed alternatives, as well as reviewing and commenting on the draft purpose and need statement and the proposed alternatives during scoping.
2. Consistent with applicable requirements, agencies should consider any relevant public comments regarding the identification of reasonable alternatives.
3. Consistent with applicable requirements, agencies should consider whether the proposed alternatives avoid and/or mitigate impacts to minority populations and low-income populations. As appropriate, agencies may wish to consider distribution of benefits to minority populations and low-income populations.
4. Consider documenting the rationale used for selecting and eliminating alternatives from detailed study, including those additional alternatives supported or proposed by the minority populations and low-income populations.
5. When minority populations and low-income populations would be affected by the proposed action, agencies may wish to consider the following types of mitigation for selecting reasonable alternatives (as appropriate):
  - identify alternate locations or sites
  - alter the timing of activities to account for seasonal dependencies on natural and human resources
  - incorporate pollution prevention practices and policies to reduce the size or intensity of an action or its impacts
  - include additional benefits to the community

<sup>6</sup> When convening groups, Agencies should consider the potential applicability of the Federal Advisory Committee Act (FACA) of 1972 (PL92-463).

- incorporate other measures proposed by the community, including changing specific aspects of the project
- do not implement the proposed action or action alternative.

Proper documentation for the chosen type of mitigation should be provided in the NEPA document.

6. Agencies may wish to consider identifying any alternatives that would result in a disproportionately high and adverse impact to minority populations and low-income populations.
7. Agencies may wish to consider which alternative(s) have the least adverse impact to minority populations and low-income populations and alternatives that would minimize or mitigate disproportionately high and adverse impacts as a factor when identifying reasonable alternatives and the preferred alternative.
8. Consider documenting any steps that may have been taken by agencies to receive community input during the development of: 1) the purpose and need statement; 2) reasonable alternatives; and 3) identification of a preferred alternative.



## V. IDENTIFYING MINORITY POPULATIONS

### Guiding Principles

Agencies can be informed by consideration of the following guiding principles:

1. In general, minority populations are identified based on the “affected environment.” (See section 3) Minority populations may consist of groups of culturally different subpopulations with potentially different impacts and outreach needs. Minority populations may be dispersed throughout the study area, but have significant numbers.
2. Minority populations may reside in tightly clustered communities, or be evenly or unevenly distributed throughout the general population. Selecting a geographic unit of analysis (e.g., county, state, or region) without sufficient justification may portray minority population percentages inaccurately by artificially diluting their representation within the selected unit of analysis.
3. To sufficiently identify small concentrations (i.e., pockets) of minority populations, agencies may wish to supplement Census data<sup>7</sup> with local demographic data. Local demographic data and information (including data provided by the community and Tribes) can improve an agency’s decision-making process. Anecdotal data should be validated for accuracy whenever possible. Agencies should disclose, as appropriate, when anecdotal data has not been validated.
4. When conducting the *Meaningfully Greater* analysis<sup>8</sup> (described below) agencies can benefit by being sensitive to situations where a large percentage of the residents is comprised of minority individuals. In selecting the appropriate reference community, it is important to capture relevant demographic information. A larger scale reference community (e.g., municipal, state, or regional) may be required under this circumstance to obtain results that accurately reflect the existence of a minority population in the geographic unit of analysis (e.g., census block) being analyzed.

<sup>7</sup> Some populations may not be fully accounted for in Census data. As appropriate, agencies can consider using local sources of data (including data provided by the community and Tribes) to conduct the *No Threshold* analysis.

<sup>8</sup> *Meaningfully greater* is a term used in “Appendix A, Text of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Annotated with Proposed Guidance on Terms” which is attached to CEQ’s [\*Guidance Under the National Environmental Policy Act \(1997\)\*](#).

5. The *Fifty Percent* analysis <sup>9</sup>(described below) can be conducted to initially identify the extent to which minority populations reside within the affected environment. An aggregate of minority populations over 50% for the entire affected environment indicates increased scrutiny in the environmental justice analysis may be appropriate (e.g. to assess majority minority populations). Agencies may wish to conduct the *Meaningfully Greater* analysis, regardless of the results from the *Fifty Percent* analysis.
6. The use of thresholds to identify minority populations is an established method but may not always capture relevant demographic information. Regarding the identification of minority populations, population size is a factor considered in the *Fifty Percent* analysis and *Meaningfully Greater* analysis. The *No-Threshold* analysis (described below) attempts to identify all minority populations regardless of population size. Either the *No-Threshold* analysis alone, or conducting both the *Fifty Percent* and *Meaningfully Greater* analyses together can be used to identify minority populations prior to the determination of disproportionately high and adverse impacts.
7. The *Fifty Percent* analysis plays an important role in identifying minority populations when a large percentage of the population in the geographic unit of analysis or reference community is comprised of minority individuals. Under these circumstances, the *Fifty Percent* analysis can function as a direct measure, to ensure that when minority individuals comprise a majority of an appropriate geographic unit of analysis (e.g., block group<sup>10</sup>) a minority population is identified, regardless of whether the *Meaningfully Greater* analysis has a similar outcome.
8. When either the *No-Threshold* analysis has been conducted, or when the *Fifty Percent* analysis and *Meaningfully Greater* analysis have been conducted, and the applicable analysis has documented a majority minority population (i.e., where a majority of the population in the affected environment is comprised of minorities) special emphasis should (as appropriate) be placed on identification of impacts. Due to the larger number of identified minority populations in these circumstances, agencies can benefit from focusing attention and available agency resources (e.g., outreach activities and impacts analyses) on minority populations

---

<sup>9</sup>50% is a term used in “Appendix A, Text of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Annotated with Proposed Guidance on Terms” which is attached to CEQ’s [\*Environmental Justice Guidance Under the National Environmental Policy Act \(1997\)\*](#).

<sup>10</sup> Census [Block Groups](#) are statistical divisions of census tracts, are generally defined to contain between 600 and 3,000 people, and are used to present data and control block numbering. A block group consists of clusters of blocks within the same census tract that have the same first digit of their four-digit census block number.



that are potentially disproportionately impacted by the proposed action (i.e., see the factors listed in Disproportionately High and Adverse Impacts section).

9. Agencies can be informed by determining if any minority or low-income transient or geographically dispersed populations (e.g., Native Americans, migrant farm workers) reside seasonally within the affected area or may otherwise be affected (e.g. may reside elsewhere but come within the affected area for subsistence fishing or to collect traditional medicines) by consulting sources such as: 1) the US Department of Agriculture 2012 Census of Agriculture, Table 7: Hired Farm Labor Less than 150 Days and Migrant Farm Labor on Farms with Hired Labor; and 2) community members and other interested individuals or organizations, or other appropriate sources.

## Specific Steps

As appropriate, agencies can consider the following actions:

The identification of minority populations can be accomplished in various ways. These ways, discussed in the following Specific Steps, include but are not limited to: A) the *No Threshold* analysis; or B) both the *Fifty Percent* analysis and the *Meaningfully Greater* analyses in concert.

A reference community is helpful for context and for future disproportionate effects analysis. A reference community's total number of minority individuals and percent minority can be compared to the population in the affected environment or geographic unit of analysis. Agencies may wish to clearly articulate the basis for the selection of a reference community.

### A) To conduct the *No-Threshold* analysis:

1. Select an appropriate geographic unit of analysis (e.g., census block, block group).<sup>11</sup>
2. Determine the total number of minority individuals (all individuals other than non-Hispanic whites) and the percent minority for each geographic unit of analysis within the affected environment.

<sup>11</sup>**Census Blocks** are the smallest geographic areas that the Census Bureau uses to tabulate decennial data. Blocks are statistical areas bounded by visible features, such as streets, roads, streams, and railroad tracks, and by nonvisible boundaries, such as selected property lines and city, township, school district, and county limits. **Block Groups** are statistical divisions of census tracts, are generally defined to contain between 600 and 3,000 people, and are used to present data and control block numbering. A block group consists of clusters of blocks within the same census tract that have the same first digit of their four-digit census block number.



3. Identify the existence of a minority population for each geographic unit of analysis in which Step 2 (above) indicates a minority percentage.
4. Display the minority populations in map and table format by geographic unit of analysis, as appropriate.
5. Provide a written rationale which explains the selection of the geographic unit of analysis, the reference community, and other methods used to identify minority populations.

- OR -

B) To conduct both the Fifty Percent analysis and the Meaningfully Greater analyses in concert:

(i) Conducting the Fifty Percent analysis

1. Determine the total number of individuals residing within the affected environment.
2. Determine the total number of minority individuals (all individuals other than non-Hispanic whites) residing within the affected environment.
3. Select the appropriate geographic unit of analysis within the affected environment (e.g., census block, block group).
4. Determine the percentage of minority individuals (including Hispanics) residing within the geographic unit of analysis.
5. If the percentage of minorities residing within the geographic unit of analysis meets or exceeds 50%, note the existence of a minority population.
6. Next, compare the total number of minorities residing within the affected environment against the total number of individuals residing within the affected environment, in order to determine the percentage of minority individuals residing within the affected environment.
7. If the percentage of minorities residing in the affected environment exceeds 50%, consider noting the need for a heightened focus throughout the entire environmental justice analysis.
8. After completion of the *Fifty Percent* analysis, conduct the *Meaningfully*

*Greater analysis.*

(ii) Conducting the *Meaningfully Greater* analysis:

1. Select the appropriate geographic unit of analysis for the affected environment (e.g., census block, block group).
2. Select the appropriate reference community (e.g., county, state).
3. Select the appropriate meaningfully greater threshold for comparison. The *Meaningfully Greater* analysis requires use of a reasonable, subjective threshold<sup>12</sup> (e.g., ten or twenty percent greater than the reference community). What constitutes 'meaningfully greater' varies by agency, with some agencies considering any percentage in the selected geographic unit of analysis that is greater than the percentage in the appropriate reference community to qualify as being meaningfully greater.
4. Compare the percentage of minority individuals residing within the selected geographic units of analysis to the percentage of minority individuals residing within the reference community.
5. If the percentage of minorities residing within the geographic unit of analysis is meaningfully greater (based on application of the threshold) either individually or in the aggregate, than the percentage of minorities residing within the reference community, disclose the existence of a minority population.
6. Display identified minority populations in a map and table format, as appropriate. Care should be taken to present accurate and current data and information, and explain the limitations of the data and information.
7. Provide a written rationale which explains the selection of the geographic unit of analysis, the reference community, the meaningfully greater threshold, and other methods used to identify minority populations.

<sup>12</sup> To calculate benchmark values, some Agencies use a percent of the absolute number rather than adding a subjective threshold present. This is especially important when the percent of the minority population is small.



## VI. IDENTIFYING LOW-INCOME POPULATIONS

### Guiding Principles

Agencies can be informed by consideration of the following guiding principles:

1. When identifying low-income populations, it may be useful for agencies to consider the publication date for poverty data that is used in the Census Bureau's poverty thresholds and the U.S. Department of Health and Human Services' poverty guidelines or other agency-specific poverty guidelines. Using the most current poverty data is preferable but agencies should also consider whether there are differences in the dates for local, state and national data.
2. Agencies may wish to refine low-income status determinations, whenever possible. Use of local data sources on poverty may be more current than the Census Bureau's American Community Survey or other periodically-collected data sources.
3. There are several ways to assess low-income thresholds, such as identifying the proportion of individuals below the poverty level, households below the poverty level, and families with children below the poverty level. It may be reasonable to assess low-income thresholds in more than one way to be more inclusive.
4. Low-income populations may reside in tightly clustered communities, rather than being evenly distributed throughout the general population. Selecting a geographic unit of analysis (e.g., county, state, or region) without sufficient justification may portray low income population percentages inaccurately by artificially diluting their representation within the selected unit of analysis.
5. Low-income status need not always be capped at the poverty level. In some instances, it may be appropriate for agencies to select a threshold for identifying low-income populations that exceeds the poverty level.

### Specific Steps

As appropriate, agencies can consider the following actions:

The identification of low-income populations can be accomplished in various ways, including by conducting either: A) the *Alternative Criteria* analysis; or B) the *Low-Income Threshold Criteria* analysis.

While not required for the *Alternative Criteria* analysis, a reference community can be

helpful by providing context and for future disproportionate effects analysis. Agencies may wish to clearly articulate the basis for the selection of a reference community for either the *Alternative Criteria* analysis or the *Low-Income Threshold Criteria* analysis.

A. Conducting the *Alternative Criteria* analysis:

1. Select and disclose the appropriate poverty thresholds as defined by the Census Bureau, the poverty guidelines as defined by the Department of Health and Human Services, or other appropriate source (e.g., federal program eligibility standards).
2. Select an appropriate geographic unit of analysis (e.g. block group, census tract) for identifying low-income populations in the affected environment.
3. Select an appropriate threshold for determining whether a particular geographic unit of analysis is identified as a low-income population. (See section 6.1:5, p.28)
4. Determine the total number of low-income individuals (or households) and the percent low-income for each geographic unit of analysis within the affected environment.
5. Identify the existence of a low-income population for each geographic unit of analysis in which Step 4 (above) indicates a low-income percentage at or above the selected Census Bureau poverty threshold or the Department of Health and Human Services poverty guidelines, or other appropriate alternate source.
6. Display the low-income populations in map and table format by geographic unit of analysis, as appropriate.

B. Conducting the *Low-Income Threshold Criteria* analysis:

1. Select and disclose the appropriate poverty thresholds as defined by the Census Bureau, the poverty guidelines as defined by the Department of Health and Human Services, or other appropriate source (e.g., federal program eligibility standards).
2. Select an appropriate geographic unit of analysis (e.g., block group, census tract) for identifying low-income populations in the affected environment.



3. Select the appropriate reference community (e.g., county, state) to compare against the geographic units of analysis.
4. Select an appropriate measure(s) (such as individuals below the poverty level, median household income, or families below the poverty level) for comparing the poverty level in the geographic unit of analysis to the reference community.
5. Select an appropriate threshold for determining whether a particular geographic unit of analysis is identified as low-income. (See Guiding Principle 5).
6. Determine the percentage of individuals (or households) at or below the selected low-income threshold for the reference community and in each geographic unit of analysis.
7. Compare the percentage (from Step 6 above) in each geographic unit of analysis to the percentage in the reference community.
8. If the percentage in the geographic unit of analysis is equal to or greater than that of the reference community, disclose the existence of a low-income population.
9. Display in the NEPA document low-income populations identified within the affected environment in a meaningful way, such as a map, table, pie-chart, etc. (as appropriate).
10. Provide a written rationale in the NEPA document which explains the selection of data sources and other methods that were used to identify low-income populations regardless of whether the *Alternative Criteria* analysis or *Low-Income Threshold Criteria* analysis was done. If some data sources were preferentially used over others, provide rationale supporting their selection.

## VII. IMPACTS ANALYSIS

### Guiding Principles

Agencies can be informed by consideration of the following guiding principles:

1. When analyzing the proposed action, it is important to recognize the relationship between potential impacts and potential exposures, as these terms are not synonymous. An impact is the adverse or beneficial result of exposure or other environmental consequences of the proposed action.
2. Impacts from the proposed action to minority populations and low-income populations in the affected environment may be either adverse or beneficial. The specific conditions and characteristics of the affected community including differences among minority subpopulations can inform whether the impact is beneficial or adverse. It is important to realize that what is considered a beneficial impact to some communities may be considered an adverse impact to others.
3. Potential direct, indirect, and cumulative impacts on minority populations and low-income populations in the affected environment include both human health and environmental impacts from an agency's programs, policies, or activities. Potential environmental impacts encompass both the natural and physical environment and can include ecological, aesthetic, historic, cultural, economic, social, or health<sup>13</sup> impacts to minority populations and low-income populations in the affected environment.
4. Background data on minority populations and low-income populations in the affected environment can enhance an agency's understanding of the nature and severity of potential impacts, which in turn informs an agency's decision-making process. Sources of data include, but are not limited to, national data sets (e.g., U.S. Census, National Vital Statistics System, National Birth Defect Registry, Area Health Resources Files, and National Registry for Historic Places) and state and local data sets (e.g., State Cancer Registries, State Register of Cultural Properties). In addition, empirical data, based on verifiable observations or experience, can also be used for the analysis.
5. In accordance with applicable regulations, federal agencies may wish to

<sup>13</sup> Ecological, aesthetic, historic, cultural, economic, social or health impacts are delineated as effects in 40 CFR § 1508.8 and in Appendix A, "Text of Executive Order 12898, 'Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,' Annotated with Proposed Guidance on Terms" which is attached to CEQ's [\*Environmental Justice Guidance Under the National Environmental Policy Act \(1997\)\*](#).



consider identifying the presence of transient and/or geographically dispersed populations and whether there is a potential for any unique or amplified impacts to these populations. Native Americans, farm workers, and other transient laborer and/or geographically dispersed populations are potentially more susceptible to environmental and health impacts. Reasons for this may include: 1) prolonged exposure to the natural environment with potential exposure to environmental hazards; 2) limited access to health care providers; 3) generally lower level of education; or 4) propensity for limited English proficiency.

6. As appropriate, Health Impact Assessments (HIAs), Social Impact Assessments (SIAs), and social determinants of health (consideration of economic and social conditions influencing human health) can provide agencies with important background data. Agencies may consider reaching out to entities both inside and outside the Federal government to seek their help in preparing HIAs, SIAs, and considering the social determinants of health, as either part of or an addendum to the NEPA document.
7. Minority populations and low-income populations in the affected environment may hold an opposing technical or scientific view (which can be based on several sources, including the community) from agencies regarding specific impacts and/or methods of analysis. Responsible opposing views from minority populations and low-income populations in the affected environment, including views regarding an impact's status as disproportionately high and adverse, may warrant discussion in a NEPA document. In instances of a Final Environmental Impact Statement, NEPA requires that agencies must discuss any responsible opposing view raised by the community which was not adequately discussed in the draft statement and indicate the agency's response to the issues raised (e.g., 40 CFR §1502.9(b)).
8. NEPA requires agencies to consider three types of effects or impacts: (1) direct effects, which are caused by the action and occur at the same time and place; (2) indirect effects, caused the action and are later in time or farther removed in distance, but are still reasonably foreseeable; and (3) cumulative impacts, the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. When assessing cumulative impacts, agencies may wish to (as appropriate):
  - be mindful that minority populations and low-income populations in the affected environment may be differently affected by past, present, or reasonably foreseeable future impacts than the general population; and

- in some circumstances, consider (among other existing conditions) chemical and non-chemical stressors that could potentially amplify impacts from the proposed action to the health of minority populations and low-income populations in the affected environment. Non-chemical stressors can include current health status (e.g. pre-existing health conditions) and past exposure histories, and social factors such as community property values, sources of income, level of income, and standard of living.
9. Consistent with applicable requirements, agencies should consider, when a proposed action that may fall within a categorical exclusion (CE) involves impacts to minority populations and low-income populations in the affected environment, whether any extraordinary circumstances are applicable. Extraordinary circumstances are unique situations that may result in potential impacts beyond those generally arising from actions subject to the CE. Agencies have developed their own definitions of the type of circumstances that may constitute extraordinary circumstances, and those regulations should be consulted. Before determining that a proposed action can be categorically excluded, it must be determined whether extraordinary circumstances may exist (e.g., 40 CFR §1508.4). If a proposed action that otherwise would be categorically excluded could potentially have a disproportionately high and adverse impact on minority populations and low-income populations in the affected environment, this could contribute to finding an extraordinary circumstance requiring the project undergo further analysis in an Environmental Assessment or EIS, as appropriate.
  10. According to the Intergovernmental Panel on Climate Change (IPCC) “[c]limate-related hazards exacerbate other stressors, often with negative outcomes for livelihoods, especially for people living in poverty... Climate-related hazards affect poor people’s lives directly through impacts on livelihoods, reductions in crop yields, or destruction of homes and indirectly through, for example, increased food prices and food insecurity” (*IPCC, Climate Change 2014*). Agencies may wish to consider how impacts from the proposed action could potentially amplify climate change-related hazards (e.g., storm surge, heat waves, drought, flooding, and sea level change) in minority populations and low-income populations in the affected environment, and vice versa. Agencies may benefit by considering climate resilience in the proposal’s design and alternatives.



11. In some circumstances, agencies may consider cumulative impacts that may result from chemical and non-chemical stressors, exposures from multiple routes or sources, and factors that differentially affect exposure or toxicity to communities.
  - The cumulative ecological, aesthetic, historic, cultural, economic, social, or health effects of the proposed action can arise from and also include *non-chemical stressors*.
  - Communities can experience cumulative impacts to one or more chemical, biological, physical, or radiological contaminants across environmental media (e.g., air, water, soil, land use) from single or multiple sources, over time in one or more locations.
  - Communities can experience multiple exposures from any combination of direct, indirect, or cumulative impacts to two or more chemical, biological, physical, or radiological contaminants from single or multiple sources.
12. As with any resource area, whether environmental justice is being addressed within each individual resource section of the NEPA document or it is addressed in a single section of the NEPA document, agencies can benefit from a transparent presentation of environmental justice issues. Agencies may wish to consider including in the Introduction, Overview, and/or Executive Summary section of the NEPA document a brief discussion and/or table presenting a summary of the environmental justice impacts discussed in greater detail within the document. This discussion may consider providing environmental justice information, such as general findings and conclusions to make the information readily accessible for agency decision-making and to facilitate public use. Agencies may note in the table of contents all areas where environmental justice is discussed.

### Significance

1. Pursuant to NEPA, the human environment includes both the natural and physical (e.g., built) environment and the relationship of people with that environment. Significant impacts to the human environment (including minority populations and low-income populations) can result from ecological, aesthetic, historic, cultural, economic, social, or health impacts. However, economic or social impacts are not considered significant unless they are interrelated with natural or physical environmental impacts.
2. Executive Order 12898 does not change the legal thresholds for NEPA, including whether a Categorical Exclusion, Environmental Assessment, or an

Environmental Impact Statement should be prepared.

3. A disproportionately high and adverse impact to minority populations and low-income populations can occur at any level of NEPA review. In some circumstances, an agency may determine that impacts are disproportionately high and adverse, but not significant within the meaning of NEPA. In other circumstances, an agency may determine that an impact is both disproportionately high and adverse and significant within the meaning of NEPA.
4. In general, pursuant to NEPA, determining whether an impact is significant requires consideration of both context (i.e., society as a whole, the affected region, the affected interests, and the locality) and intensity (i.e., the severity of the impact) (see 40 CFR §1508.27(a)-(b)). The impacts of a proposed action on minority populations and low-income populations should inform the determination of whether impacts are significant.
5. An assessment of an impact's significance to the general population without consideration of the impact to minority populations and low-income populations in the affected environment may not be adequate. An agency's consideration of impacts to minority populations and low-income populations helps ensure that significant impacts are identified.
6. Executive Order 12898 instructs agencies to determine whether impacts are disproportionately high and adverse to minority populations and low-income populations but EO 12898 does not address significance. Agencies may choose to consider determining whether an impact is significant prior to analyzing whether the impact is disproportionately high and adverse, since significance may be a factor for consideration in an agency's disproportionately high and adverse determination.<sup>14</sup> To the extent agencies seek additional guidance on how to analyze significance. Refer to CEQ NEPA regulation on significance at 40 CFR §1508.27. (See also section 7.1-2)
7. Determining whether an impact is significant to minority populations and low-income populations in the affected environment involves focusing the analysis on aspects of context and intensity most relevant to the impacted community. In general, this entails focusing on various factors related to an impact's severity

<sup>14</sup> See Appendix A, "Text of Executive Order 12898, 'Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,' Annotated with Proposed Guidance on Terms in the Executive Order," which is attached to CEQ's [\*Environmental Justice Guidance Under the National Environmental Policy Act \(1997\)\*](#)



(discussed in 40 CFR §1508.27(b)) as they pertain to the community's affected interests and locality (context).

8. The degree to which an impact involves unique or unknown risks (see 40 CFR §1508.27(b)(5)) to minority populations and low-income populations in the affected environment can inform how agencies assesses the significance of the impact. Minority populations and low-income populations could be uniquely susceptible to impacts from a proposed action due to: 1) special vulnerabilities, e.g. pre-existing health conditions that exceed norms among the general population; 2) unique routes of exposure, e.g. use of surface or well water in rural communities; or 3) cultural practices, e.g. subsistence fishing, hunting or gathering, access to sacred sites.
9. When both positive and adverse impacts have been identified, a significant impact may exist even if an agency believes that on balance the effect will be beneficial (see 40 CFR §1508.27(b)(1)). While an action may result in an overall potentially beneficial impact to the general population, the impact may still present an adverse impact to minority populations and low-income populations in the affected environment.
10. Additional factors related to an impact's intensity (discussed in 40 CFR §1508.27(b)) that could lead to a finding of significance to minority populations and low-income populations in the affected environment, despite having no significant impact to the general population include: 1) the health and safety of the community; 2) the community's unique geographic characteristics, including proximity to cultural resources; 3) the degree to which the action may establish a precedent for future actions with significant effects; 4) loss of significant cultural or historical resources; and 5) the impact's relation to other cumulatively significant impacts.
11. The various factors related to an impact's intensity (discussed in 40 CFR §1508.27(b)) can also help inform an agency's consideration of potential mitigation measures and identification of potential disproportionately high and adverse impacts.
12. When assessing the availability of information regarding minority populations and low-income populations in the affected environment, information may be less available than for the general population. When an agency is evaluating reasonably foreseeable significant impacts in an environmental impact statement, it may wish to consider the availability of information regarding minority populations and low-income populations. If relevant information on

minority populations and low-income populations is not currently in the possession of an agency, this should be clearly stated. If the unavailable information is essential to making a reasoned choice among alternatives, NEPA provides that an agency must make reasonable efforts to collect the information, so long as the means for obtaining it are known and the cost is not exorbitant (see 40 CFR §1502.22(a)-(b)). If the overall costs of obtaining the unavailable information needed to conduct the analysis is exorbitant or the means to obtain it are not known, NEPA provides that an agency should (as appropriate): 1) state the information is incomplete or unavailable; 2) state the relevance of the incomplete or unavailable information; 3) summarize existing credible scientific evidence relevant to evaluating the impact; and 4) include an evaluation of such impacts based on theoretical approaches or research methods generally accepted in the scientific community. Agencies may consider addressing unavailable information in other NEPA documents in a similar manner. Agencies may choose to proceed in the same way if subpopulation information not currently in possession of an agency is not essential, but could aid in assessing impacts rather than determining significance regardless of whether the proposed action is significant (e.g., during Environmental Assessments).

13. Considering whether a proposed action may result in an impact with a low probability of occurrence, but with catastrophic consequences (i.e., low-probability, high impact event) can inform an agency's assessment of the significance of the impact. When analyzing a proposed action's impacts and risks in an EIS from reasonably foreseeable low-probability, high-impact events (including, but not limited to, accidental releases of contaminants and natural disasters) agencies may wish to consider the availability of information concerning the potential unique vulnerabilities of minority populations and low-income populations in the affected environment (see 40 CFR §1502.22(b)). Potential vulnerabilities of minority populations and low-income populations to low-probability, high-impact events may include, but are not limited to, a lack of infrastructure and resources to address these unanticipated impacts; inability to evacuate or relocate; lack of access to health care; and reliance on affected natural and cultural resources. Agencies may consider addressing unavailable information in other NEPA documents (e.g. during Environmental Assessments) in a similar manner.
14. The degree to which an impact to minority populations and low-income populations in the affected environment is highly controversial (see 40 CFR §1508.27(b)(4)) (e.g., a substantive dispute as to the size, nature, or effect of the



action) can inform whether there is a significant impact. If an agency identifies a highly controversial impact to minority populations and low-income populations it may wish to consider seeking additional information and coordination in order to evaluate the controversy.

## Specific Steps

As appropriate, agencies can consider the following actions:

1. Agencies may wish to recognize that there may be cultural differences among various individuals, communities, and organizations regarding what constitutes an impact or the severity of an impact.
2. Evaluation of impacts to minority populations and low income populations may inform other sections, including an agency's consideration of the affected environment, alternatives and meaningful engagement.
3. Agencies may wish to begin analyzing potential adverse and beneficial impacts to minority populations and low-income populations after the exposure pathways and environmental consequences of the proposed action (e.g., ecological, aesthetic, historic, cultural, economic, social, or health impacts) are identified and the affected environment is established. However, economic or social impacts, alone, are not considered significant unless they are interrelated with natural or physical environmental impacts.
4. Agencies may wish to make diligent efforts to meaningfully engage minority populations and low-income populations in the affected environment regarding possible impacts from the proposed action and document findings throughout the NEPA process. Engaging the community about possible impacts is most effective when initiated as early as possible in the NEPA process (see Section I).
5. Agencies may consider analyzing potential impacts in light of: 1) public input documented in Step Two above; and 2) previously collected data on minority populations and low-income populations in the affected environment, particularly with regard to unique conditions. Unique conditions include, but are not limited to ecological, aesthetic, historic, cultural, economic, social, or health vulnerabilities.
6. Agencies may consider describing all reasonably foreseeable direct, indirect and cumulative adverse impacts to minority populations and low-income populations in the affected environment that may result from a change to the

environment or exposure to environmental contaminants (e.g., chemical, biological, physical, or radiological) or arising from related ecological, aesthetic, historic, cultural, economic, social, or health consequences of the proposed action to the community.

7. Agencies may consider describing all reasonably foreseeable direct, indirect and cumulative beneficial impacts to minority populations and low-income populations in the affected environment that may result from a change to the environment or exposure to environmental contaminants (e.g., chemical, biological, physical, or radiological) or arising from related ecological, aesthetic, historic, cultural, economic, social, or health consequences of the proposed action to the community.
8. Agencies may consider identifying and documenting sources of uncertainty in the impact analyses, particularly with regard to data supporting the characterization of subpopulations (See section 5, p.23 and section 6, p.28)
9. Agencies may wish to provide the records that reflect an agency's rationale for any decisions made as part of the analyses, as well as an agency's chosen methods and data used to conduct the impact analyses.



## **VIII. DISPROPORTIONATELY HIGH AND ADVERSE IMPACTS**

### **Guiding Principles**

Agencies can be informed by consideration of the following guiding principles:

1. As informed by CEQ's *Environmental Justice Guidance Under the National Environmental Policy Act* (1997), the identification of a disproportionately high and adverse impact on minority and low income populations does not preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmentally unsatisfactory. If an agency determines there is a disproportionately high and adverse impact to minority populations and low-income populations, an agency may wish to consider heightening its focus on meaningful public engagement regarding community preferences, considering an appropriate range of alternatives (including alternative sites), and mitigation and monitoring measures.
2. 'Context' and 'intensity', evaluated during the consideration of an impact's significance (See 40 CFR §1508.27) may be factors that can (as appropriate) inform an agency's determination whether an impact is disproportionately high and adverse (See Executive Order 12898).
3. 'Significance' may, as appropriate, be a factor in determining if an impact is disproportionately high and adverse. (See Appendix A, Text of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Annotated with Proposed Guidance on Terms" which is attached to CEQ's *Environmental Justice Guidance Under the National Environmental Policy Act* (1997) ). In some circumstances, an agency may determine that impacts are disproportionately high and adverse, but not significant within the meaning of NEPA. In other circumstances, an agency may determine that an impact is both disproportionately high and adverse and significant within the meaning of NEPA. A finding of no significant impacts to the general population is insufficient (on its own) to base a determination that there are no disproportionately high and adverse impacts to minority populations and low-income populations.
4. Disproportionately high and adverse impacts are typically determined based on the impacts in one or more resource topics analyzed in NEPA documents. Any identified impact to human health or the environment (e.g., impacts on noise, biota, air quality, traffic/congestion, land use) that potentially affects